October 1986 No. 55

98p

sinclair user



LIGHTFORCE
COIN-OP REALISM?

EXCLUSIVE! SPECTRUM 128K+2 FULL REVIEW

TOP TEN BULLETIN BOARDS ● HALF-PRICE MICRODRIVES ●
BUDGET ROUND-UP ● RAM SOUND SAMPLER ● COIN-OP CLONES
GLIDER RIDER ● HARRIER ● PAPERBOY ● TRIVIAL PURSUIT


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MONSTER MEM

C · O · N · T

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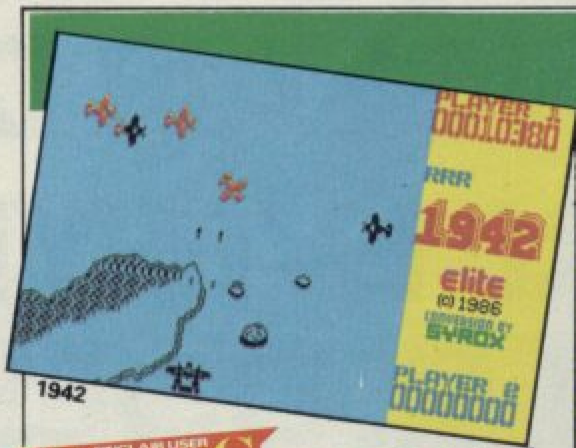
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SOFTWARE



1942



Dan Dare


Harrier

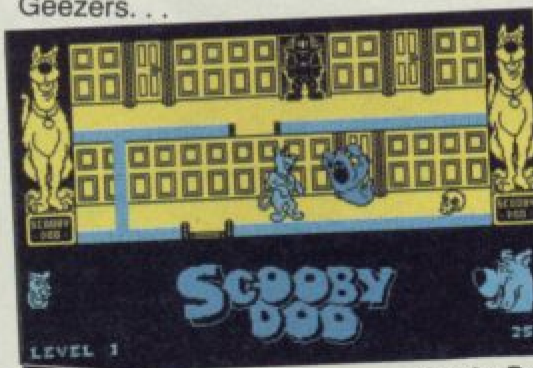


Trivial Pursuit





E · N · T · S

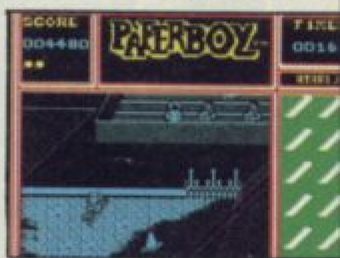


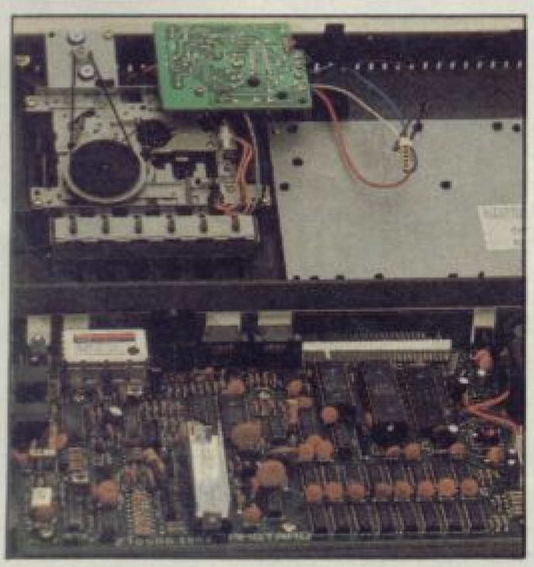
Scooby Doo

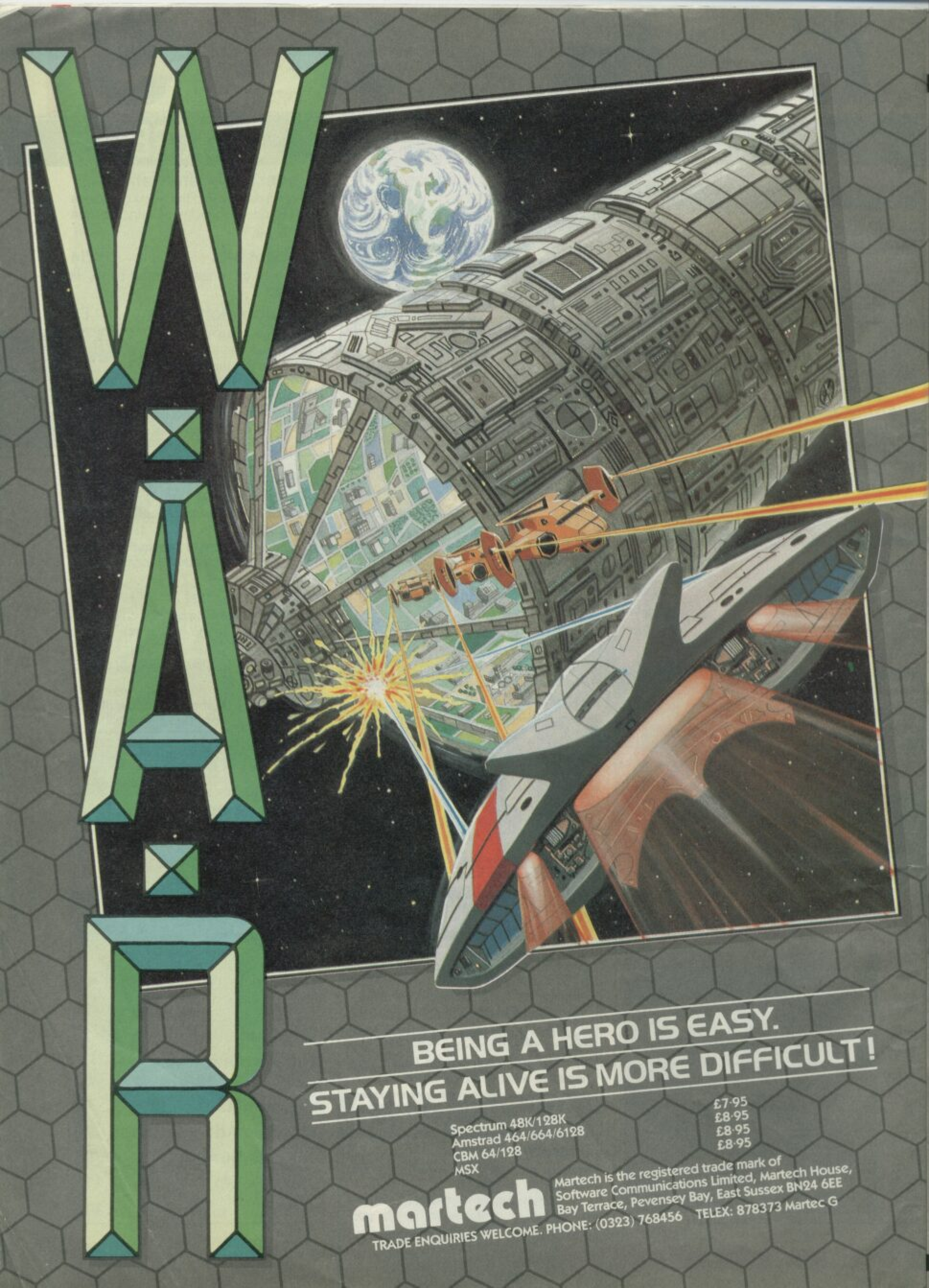


Star Trek (ST screen)








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UNDER RAPS!

- Pete Cooke is working on his follow-up to his 3D vector smash *Tau Ceti*. It's called *Academy* and is being written, like *Ceti*, for CRL
- *Asterix* is being written by the same team which wrote *The Hobbit* and *Sherlock* — Beam software, which includes Melbourne House's star programmer Phil Mitchell
- Steve Crow, author of *Wizards Lair* and *Starquake* from Bubblebus, has defected to Hewson where he's almost completed *Firelord*
- Solid Image is producing *Cholo* for Firebird. It's a new programming team but it's being managed by the same firm that handles the *Elite* programmers
- Rod Pike is working on *Dracula* for CRL. The program will compete with Piranha's soon-to-be-released *Nosferatu* title
- *Shadowfire* and *Frankie* authors Denton Designs are the team assigned to Ocean's latest film tie-in — *The Great Escape*
- *Valkerie 17* authors Ram Jam are developing the game based on Big Trouble in Little China — the soon-to-be-released big-budget movie
- Mike Singleton — the brains behind *Dark Sceptre* and *Lords of Midnight* is designing *Throne of Fire* for Melbourne House

APOLOGIES

Very Big Caves

In our August issue we gave CRL's title three stars — it should have got five

Fidofor

The Fidofor bulletin board included in our September survey has changed telephone number so please don't ring the number we printed — 01-310 4110

AMSTRAD'S 128K+2 HITS THE STREETS



It's here. Amstrad's Spectrum 128K+2. And it looks good.

The machine costs £149 with 128K, a built-in cassette deck and twin joystick ports. First deliveries of the new micro should already be in the high-street shops.

That's the basics.

We've got an exclusive review of the 128+2 with the full breakdown of its spec and our verdict — beginning on page 58 of this issue.

YET ANOTHER BASHING FOR ALIENS

Alien, the movie with the stomach-churning performance by John Hurt was turned into **Alien**, the very curious strategy game from Mindgames.

Now *Aliens* — the sequel to the movie — is shortly to become **Aliens** the computer game devised by Mark Eyles for Electric Dreams, price £9.99.

The computer game **Aliens** follows closely the plot of the film in which once again warrent officer Ripley





Girls just want to have fun . . .

(the sublime Sigourney Weaver) does battle with not one but a whole team of yukky special effects.

Armed with smart guns, you have to clear all 255 rooms (a good computing number, that) of the deadly beasties. The aliens appear in a number of guises including eggs, hand creatures and warriors. A queen alien is responsible for laying eggs and, Alien-infested rooms also spawn biomechanical growths on the walls, which also have to be cleared.

Sounds messy.

The on-screen display pictures each room, complete with attacking aliens and the bottom of the screen shows an icon of the character you are currently controlling, together with a bio-monitor for vital life signs.

Much blasting from Sigourney and a team of space marines. And lots of fast-moving violence interupted only by some cutesy stuff with a little girl who is the only survivor of a colony wiped out by the sludgy things.

Sounds like its going to need a joystick.

NEW DEALS ON PLUS AND 128

With Amstrad's new Sinclair, the 128K+2 in the shops there are some snappy bargains to be had with the Spectrum Plus and Spectrum 128. And the latter is entirely software compatible with the new machine.

Laskys has cut the price of the Spectrum Plus from £129.95 to £84.99.

Other stores are likely to follow suite in this final effort to jettison remaining stocks of the Plus.

The Spectrum 128 price has been cut by as much as £30 by some retailers. Dixons has dropped the 128 from £179.95 to £149.00. It also has the standard Plus 2 at £149.00 but at that price the package includes a data recorder and bundled software.

IT'S THE BUDGET SUPERHERO

Superman, the high-flying micro disaster from Beyond, is to be launched as a budget game by Firebird after a marketing agreement by Beyond and the current copyright holders Prism Leisure.

The game, the Spectrum version of which never originally hit the shops, will cost £2.99 and be packaged in a double cassette box — unusual for budget range products.

Prism is sure customers will be impressed with the packaging. So are we.



NEWS

GO FOR GOLD WITH MIRACLE'S MODEM

Free Telecom Gold subscriptions are being offered to anyone who buys the WS-3000 or WS-4000 modems from Miracle Technology.

The recently-launched WS-4000 is an intelligent auto-dial modem which incorporates the features of the earlier 3000 model and operates on 1200/75, 300/300 and 1200/1200 bauds. It also features Hayes and Bell standards compatibility and costs £149.95.

British Telecom and Miracle will also be launching a series of electronic mail seminars in London later this year.

More information from Miracle Technology, St Peters Street, Ipswich, IP1 1XB Tel: (0473) 216141.

BIG NAMES SUPPORT OFF THE HOOK TAPE

Arcadia and *The Stranglers* are just two of the bands who have joined with other groups to help support **Off The Hook**, the software industry's anti-drugs charity campaign.

Together with Radio One, the rock magazine *Smash Hits* and *Sinclair User* they have donated records, tee-shirts, signed photographs and computer tapes for auction in aid of the charity.

Among those individuals lending their support are Lee McDonald (Zammo from *Grange Hill*) and Letitia Dean (Sharon from *East Enders*) both of whom have offered help for the fund which has so far raised more than £70,000 for the Prince of Wales Trust.

The incredibly famous Zammo (well he *is*) from Grange Hill ▶



Simon and Nick pouting moodily for charity ▼



Stranglers express an interest . . .



BBC SOFT IN PROFIT SHOCK

BBC Soft — the software publishing arm of the BBC — is to launch **Computer Challenge — the Business Game**, based on a new BBC TV series.

The game, which appears this month in conjunction with the series, puts players in the position of a company executive. Building up profits using a series of options which are legal and illegal: book-keeping, advertising, industrial campaigns, and a slush fund for VIPs. Arson and sabotage, according to the programmers, are also legitimate alternatives.

PANDORA PORTENTS

Pandora, Sir Clive's portable computer, is now unlikely to be launched until Spring 1987.

Sinclair was forced to rethink the design of the machine when Amstrad took over the rights to the Spectrum and QL in April but the components of the reconfigured machine are currently under test. The machine is unlikely now to include flat-screen television technology but, a source close to SRL confided, it will use a Z80 chip and be data-compatible with the IBM PC.

The wafer-scale integration mass storage device, developed by Sinclair's Metalab facility and lately by Anamaric is still likely to be included in the computer.

TWTMTW
THAT WAS THE MONTH THAT WAS

Phew! This year's *Personal Computer World* Show was fantastic.

After all the gloom and doom of the last eighteen months — what with Sinclair's troubles, and those of almost every other hardware manufacturer, Commodore and Acorn included — something's suddenly snapped and things are really starting to buzz again.

The 128+2. What can you say? If Amstrad can do that why couldn't Sinclair? The 128K+2 is great. Nothing startlingly innovative I know, but it just looks and feels, well, right, somehow. Together with its real keyboard and built-in tape deck at £149 it's really neat.

If you turn a blind eye to Amstrad's gratuitous attempt to grab your pennies with it's non-standard joystick port and buy another — like the Cheetah — it looks even better.

Interesting too to see the first program with a really dancable sound-track out in time for the launch — Glider Rider. **The sound of things to come? I reckon so.**

There's some great software coming for Christmas judging by the material being previewed at *PCW*.

What with its 128K+2 and the PC1512 range of business machines Amstrad is really riding on a high — you could even sense it on the Amstrad stand. Everyone seemed to be smiling — quite difficult for some of the Amstrad crowd — so it must be true.

The 128+2 is certain to maintain Sinclair as the top-selling home computer brand. Sinclair has always been the top seller, and the 128K+2 will ensure that it will continue to be so.

Though both Commodore and Acorn are limping back into the fight — both have recently announced their first three-month profits for over a year — their Christmas offerings can't touch the 128K+2 for value.

Commodore opted out of all the *PCW* razamatazz by not exhibiting in the hóme micro hall at all — its up-rated C64, the C64C is still expected in time for Christmas but with only 64K and a rumoured price of around the £200 mark it doesn't look a contender. (The five C64Cs on an independent magazine's stand was a pretty poor launch for the new micro.)

Acorn, on the other hand is showing signs of improving. Its new BBC Master Compact micro at *PCW* is better value than the old BBC was at £399. This time its got 128K and a disc drive for £441. Another six pounds and you could buy three Sinclair 128K+2s ■

NEWS

AMSTRAD SHAPES UP FOR VICTORY

Amstrad is the firm which set this year's *PCW* show buzzing. Two new machines on display — at the business end its PC clone and for home computer owners the most exciting launch of the year — the new Spectrum 128+2.

The 128K+2 machine drew considerable attention on the first day of the show — the trade-only day. And most software firms seemed pleased with what Amstrad has done too boost the Sinclair range.



Stallone's Cobra

The show did not, however, boast any special +2 software, although there were a number of 128 conversions, including **Trivial Pursuit** from Domark, **Rocky Horror Show** from CRL and **Elite** from Firebird.

The undoubted software smash of the show as **Star Trek**, from Beyond. The stand was decked up as the bridge of the USS Enterprise the monitors were, admittedly, showing some stunning stuff.

The ST preview of **Star Trek** was on show but the programming team ganged up to tell us that the Spectrum version wouldn't look that different really? No news of a release date for it, though.

Ocean was on form with yet more movie licensing deals. The video monitors featured **Highlander**, Sylvester Stallone's **Cobra** and **Top Gun**, a fighter pilot program taken from the newly released fighter pilot film starring Tom Cruise.

Miami Vice was also ripping up the tarmac together with an impressive looking **Knight Rider** — yes, after almost a year Ocean's finally got it together.

Melbourne House was easily the noisiest software house at the show. It's releases include **Judge Dredd, Dodgy Geezers** and **Asterix**. Video monitors flashed up TV cartoons of the obnoxious Gaul while a television screen nearby showed the game to be a split-screen graphics/text adventure with **Lord of the Rings**-style graphics.

Despite a lot of dodging and weaving we were unable to spot a computerised version of *Judge Dredd* but the real McCoy passed by looking like a reject from Mr Puniverse. The game was originally supposed to be around at the show, but it's still out there somewhere waiting for imminent release.

A huge pyramid structure, containing what appeared to be a pickled squid, formed the bulk of the Activision/Electric Dreams stand(s). The thing undergoing the Branston treatment — we were told — was an Alien. It had been specially flown in to launch Electric Dreams **Aliens** game. For those of you not into gore **Aliens** is the sequel movie to the Scott Ridley mega shocker.

There wasn't much life on the Hewson stand on Day 1 but that wasn't surprising as they were all down to the Royal Kensington Hotel, singing, dancing and launching their Christmas range. For Spectrum owners that means **Firelord** and **Uridium.**

Firelord is an arcade game set in a medieval land where a wicked queen weilds a talisman of scorching death.

Uridium is a conversion of the Commodore block-buster. The 3D graphics and space shattering action, combined with the amount of interest shown by the trade at the show seem to put it on the way to super stardom.

A quick peek at Piranha, where Fergus McNeil is attempting to feed seven bloated guppies with champagne, and we're off to Firebird where British Telecomsoft has **Cholo** on show. According to the one person on the stand, the arcade game, is about the dregs of



Beyond — reckons it can get Star Trek **out by October**

humanity after the final holocaust. Solid stuff.

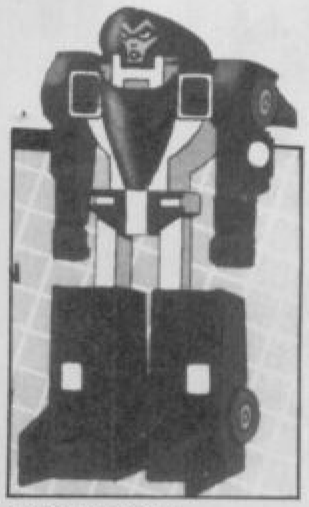
Several people from Ariolasoft insisted on showing us their latest batch of products. Most interesting were **Challenge of the GoBots,** and **Centurions** both cartoon series from TV on Saturday mornings.

At the Mikro-Gen stand not one familiar face poked its head out of the inner sanctum to greet us as we tried to spot the promised ex-member of the SAS amongst the meagre crowd. This combat-hardened individual was drafted in by Mikro Gen to promote its **SAS Assault** game. He was probably off looking at the two other SAS-style games being launched at the show by Mastertronic and Piranha.

Addictive Game(s), famous for **Football Manager, Kirel** and very little else put in a low-key performance with **President**. The strategy game is an up-dated version of dictator in which you try to run a modern society.

Digital Integration's **TT Racer** bounced at us as we made our way to FTL/Gargoyle, just to show that it really is on the way. A quick explanation of Gargoyle's Lasermation technique, used in **Lightforce** and **Shockway Rider**, and it was off to Gremlin Graphics where **Avenger** was under the spotlight. **Avenger** is the second in the **'Way of the Tiger'** martial arts series and it does look a bit like **Gauntlet**. Surprise, surprise.

Level Nine was

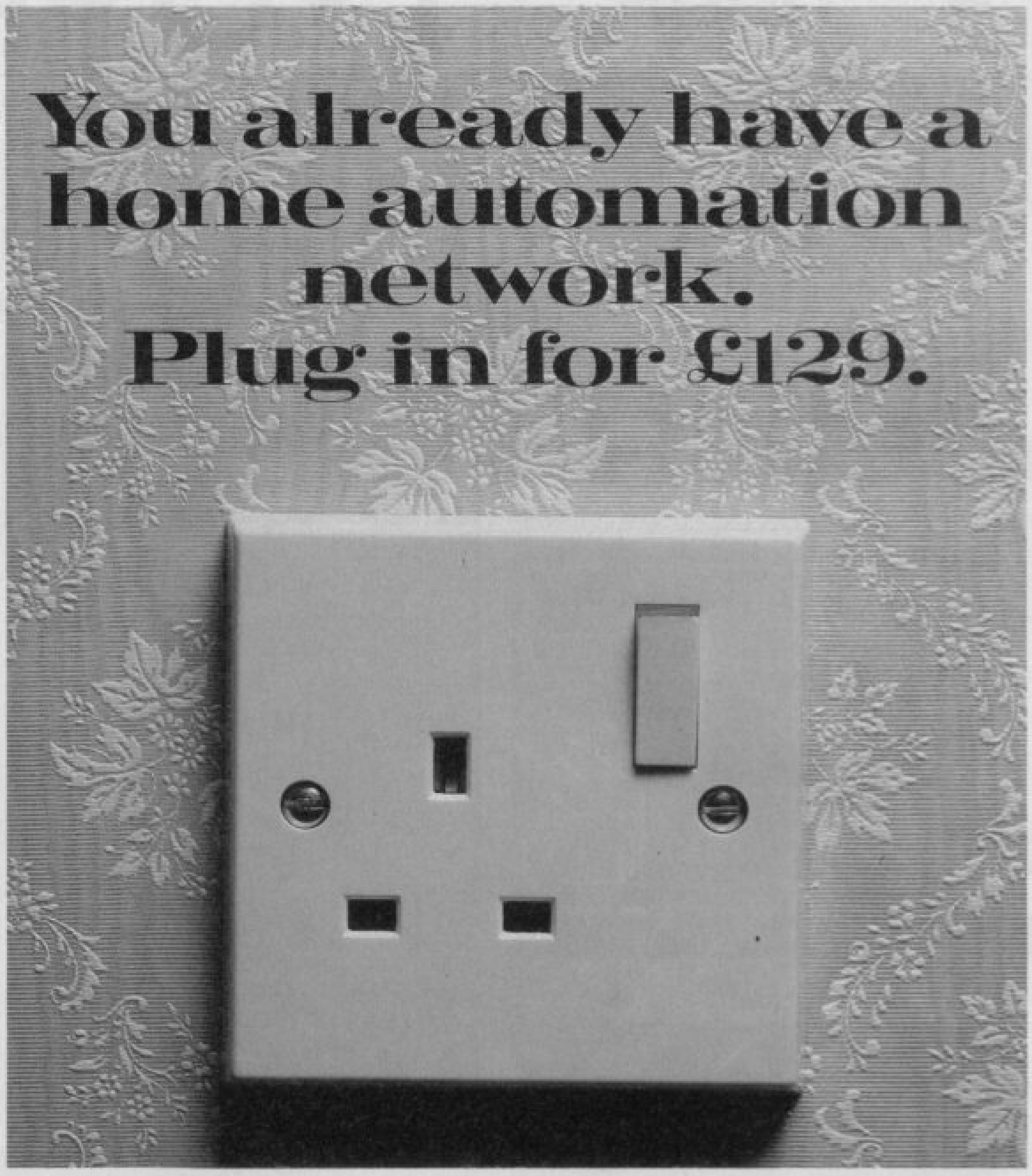


Gobots go for it

celebrating its fifth birthday, but, although we were promised slices of cake these didn't materialise. The people on the stand obviously had other things on their minds — like how much the Rainbird release of **Jewels of Darkness** and **Knight Orc** would net them.

Talking of Rainbird, the familiar face of Clare Edgeley — ex-*Sinclair User* staffer — popped around a pillar and asked who wanted to take her out for a drink. A few words about a magnificent adventure game called **The Pawn,** programmed by Magnetic Scrolls (arguably the best thing on the ST) and we set off into the sunset to take advantage of one of Olympia's three spacious bars . . . ■





If you own a BBC Micro, Commodore 64 or Spectrum 48k/128k – you could have a totally automated home at your command.

It's time your computer grew up and realised its full potential – as something more than a data base, a word-processor or an expensive toy for your kids. From now on, your home computer can do a lot more than play games.

The Red Boxes control system lets your computer earn its keep defending your home against intruders, acting as a round-the-clock security system, giving you control over any electrical appliance whether you are in, or out.

The Red Box starter system takes you right into the exciting world of home automation from as little as £129.

Just plug in for a more efficient home.

Simple to operate, it plugs straight into your home's ring main and needs no other wiring. You don't need any programming experience to operate it.

The system can control internal and external lighting, on/off switches and dimmers in different rooms in different sequence. It can activate washing machines, tumble driers, dishwashers, hi-fi, television, heaters – in fact, everything operating through your mains via a 13 amp plug.

Prevent daylight robberies.

Most burglaries happen during the day, so the Red Boxes control system works just as hard then as it does at night.

If an intruder enters your home, the Red Boxes control system will see him off sharply.

As soon as its sensor is disturbed, the alarm will raise the roof.

However, more importantly this system can also deter people entering your home by creating an appearance of constant activity.

Turn your home computer into a command terminal.

The Red Box starter system comprises three red boxes.

RED LEADER is a complete 6502 based microcomputer with 16 kbytes ROM, 8 kbytes RAM, peripheral controller with 2400 baud mains modem and host computer link, with an integrated power supply. Its powerful micro-processors turn your micro-computer into a command terminal. This is the heart of the system – its even sophisticated enough to recognise which type of computer you own!

RED ONE is a micro-processor controlled 13 amp mains outlet working under the supervision of Red Leader. With Red One at a socket you have power over domestic appliances and lights connected to that outlet.

RED TWO is a complete micro-processor controlled movement detector which feeds back data to Red Leader via mains borne signals – raising the alarm on intruders as soon as they enter its heat seeking zone.

Unique tamper-proof security.

Our Red Boxes operate a secure communications protocol. Incorporating tamper-proof PIN codes. All 'slaves' – outlets, sensors, switches – are first introduced to Red Leader using their own secret 24 bit address. Secret 'keys' are assigned to every device – lights, TV etc., known ONLY to you, and messages between devices are also encoded using random numbers to further secure the system.

No other Red Leader knows your slave codes; therefore no unauthorised person can interfere with the operation of your system.

Computer to computer communication.

Communication is a vital aspect of our Red Boxes system. Controllers are not isolated from one another – they are connected with each other, through the mains borne system and so communicate with each other and with Red Leader. If Red Two sends a message to Red Leader indicating an intruder, Red Leader responds by telling a switch unit to activate the alarm.

If you operate two home computers, they can communicate with each other through the system, enabling you to set them more complex tasks. And because Red Boxes have integral micro computers, this leaves your home micro free for normal use outside Red Boxes programming.

The possibilities are endless.

Our Red Boxes are ready for them. With humidity detectors, sensors or additional motors, this system can be used for weather monitoring, aerial rotation, home brewing, greenhouse thermostat control, keyless access via electronic door locks, remote access control via a telephone modem – even a robotic arm for performing simple mechanical tasks like tea making and shoe polishing. One day we might even invent one to iron shirts, why not. Our Project Manual at £9.95 describes a whole series of exciting applications.

Trial run.

For a FREE 14 day trial of the Red Boxes control system WITHOUT OBLIGATION complete the coupon and post to: Electronic Fulfilment Services Ltd., Chesterton Mill, French's Road, Cambridge CB4 3NP.

Your Red Boxes control system will be delivered within 28 days and if you are not delighted for any reason just return it to us for a full refund.

The Red Box starter system costs £129.

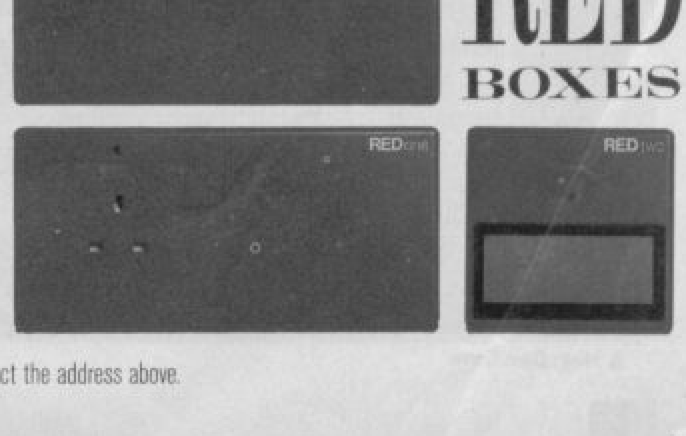
And additional Red One and Red Two Boxes are £34.95 each.

JUST PLUG IN AND SEE WHAT YOUR HOME COMPUTER IS MADE OF.

To: Electronic Fulfilment Services Ltd., Chesterton Mill, French's Road, Cambridge CB4 3NP.
Please send me the Red Box starter system at £133 (inc. £4 p.&p.)
My microcomputer is a BBC Micro/Commodore 64/Spectrum 48k/Spectrum 128k. (Delete as applicable.)
Also include: ______ Project Manuals at £9.95.
______ additional Red One control boxes at £36.95 each. (inc. £2 p.&p.)
______ additional Red Two infra red sensor boxes at £36.95 each. (inc. £2 p.&p.)

I enclose a cheque for a total of £______ made payable to General Information Systems Ltd. Readers' Account.

Signature______
Name______
Address______

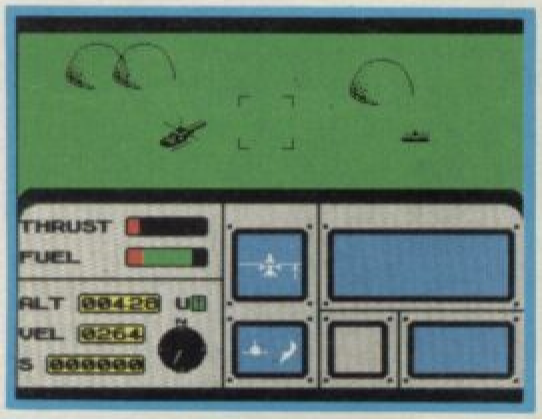


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Enquiries on technical specifications and special applications, contact the address above.

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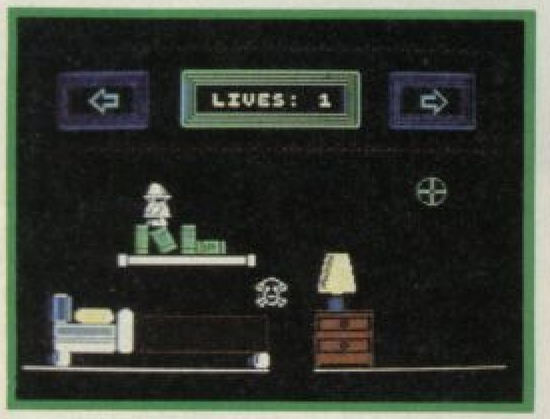
T★O★P T★W



▲ In the top slot: ACE



▲ Tip for the No 1: Paperboy



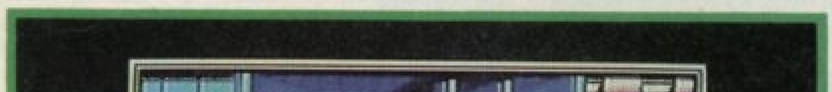
▲ Longest on the chart: Incredible Fireman

1	NEW!	ACE		CASCADE	£9.95
2	(2)	JACK THE NIPPER		GREMLIN GRAPHICS	£7.95
3	(3)	KUNG FU MASTER		US GOLD	£7.95
4	(1)	GHOSTS 'N' GOBLINS	CLASSIC	ELITE	£7.95
5	(5)	NINJA MASTER		FIREBIRD	£1.99
6	NEW!	VIDEO OLYMPICS		MASTERTRONIC	£1.99
7	(4)	MOLECULE MAN		MASTERTRONIC	£1.99
8	(15)	BOBBY BEARING		THE EDGE	£7.95
9	(6)	KNIGHT TYME		MASTERTRONIC	£2.99
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11	(8)	THEATRE EUROPE	CLASSIC	PSS	£9.95
12	NEW!	REBEL STAR		FIREBIRD	£1.99
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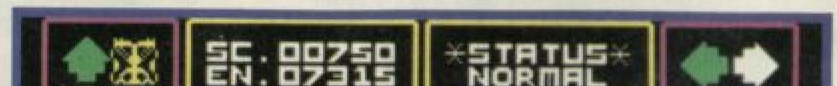
HOTTEST CLIMBERS

★ ★ ★ ★ ★ ★ ★ ★

Hottest new releases this month: **Dan Dare** is a quality blast 'n' search with smart comic-book graphics; **Lap of the Gods** is one of those vast multi-colour maze games Mastertronic seem to



▲ Hot: Dan Dare



▲ Hot: Lap of the Gods

E ★ N ★ T ★ Y

Fine flight simulator. Not much detail to get in the way of blasting things at speed	★★★★★
Cartoon graphics and masses of brain teasers. This'll sort out who are the wimps	★★★★★
Routine conversion from the C64 on which little thought or effort seems to have been expended	★★☆☆☆
Another classic arcade conversion from Elite. Fiendishly difficult	★★★★★
Poor quality. Not the Exploding Fist type game it may seem. Avoid	★☆☆☆☆
Old ideas and simple graphics but suprisingly challenging and fun to play. A budget price too	★★★★☆
Imaginative, surreal and addictive. Packs more punch than superficially similar offerings	★★★★★
A late release in the Marble Madness epidemic, but very, very nice	★★★★★
Eccentric space odyssey. A brilliant animated adventure at a budget price	★★★★★
More challenging than Commando. With more strategy too it wins hands down	★★★★★
Opportunity to play out armageddon. Chilling realism with graphic simplicity	★★★★★
Strategy game with adventuring elements. Nicely designed and astonishing value	★★★★★
An elderly equivalent of Pole Position. At budget price it's worth a second look	★★★★☆
A good shoot 'em up. Not a major release but nicely presented and challenging to play	★★★★☆
If you liked Cauldron I you'll love it. The sequel is a real advance and very difficult	★★★★★
Fairly standard arcade adventure. Hardly earth-shattering graphically. A long-running hit	★★★☆☆
Wonderfully snappy spoof of that Other Game. A triumph of insanity over logic	★★★★★
Dull wild west romp — really four games in one. Redeemed slightly by good animation	★★☆☆☆
Not terribly original perhaps, but a very well done and appealing space adventure	★★★★★
Played like the Pole Position racing game. The Sellotape tin as a steering wheel is great	★★★★☆

specialise in and **Mindstone** is a very inventive strategy come adventure game with a fine mix of traditional and novel features — including a multi-command mode option



▲ Hot: Mindstone

Compiled by Gallup for *Sinclair User*

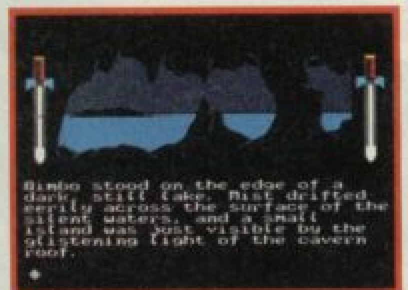
CHART ★ ★ ★ ★ BREAKDOWN

ARCADE

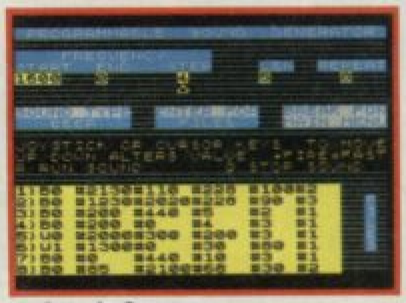
1	JACK THE NIPPER	GREMLIN
2	KUNG FU MASTER	US GOLD
3	GHOSTS 'N' GOBLINS	ELITE
4	NINJA MASTER	FIREBIRD
5	MOLECULE MAN	MASTERTRONIC

ADVENTURE

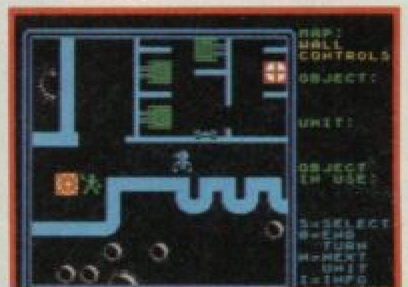
1	THE BOGGIT	CRL
2	HEAVY ON THE MAGICK	GARGOYLE
3	MINDSTONE	THE EDGE
4	PRICE OF MAGIK	LEVEL 9
5	SEA BASE DELTA	FIREBIRD



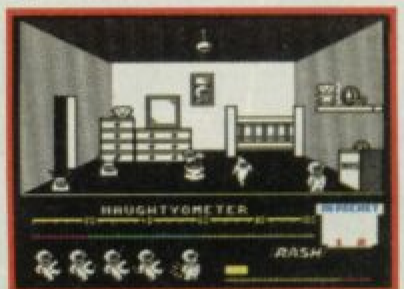
▲ The Boggit



▲ Arcade Creator



▲ Rebel Star



▲ Jack the Nipper

STRATEGY SIMULATION

1	ACE	CASCADE
2	VIDEO OLYMPICS	MASTERTRONIC
3	THEATRE EUROPE	PSS
4	RUGBY LEAGUE MANAGER	ARTIC
5	SPORT OF KINGS	MASTERTRONIC

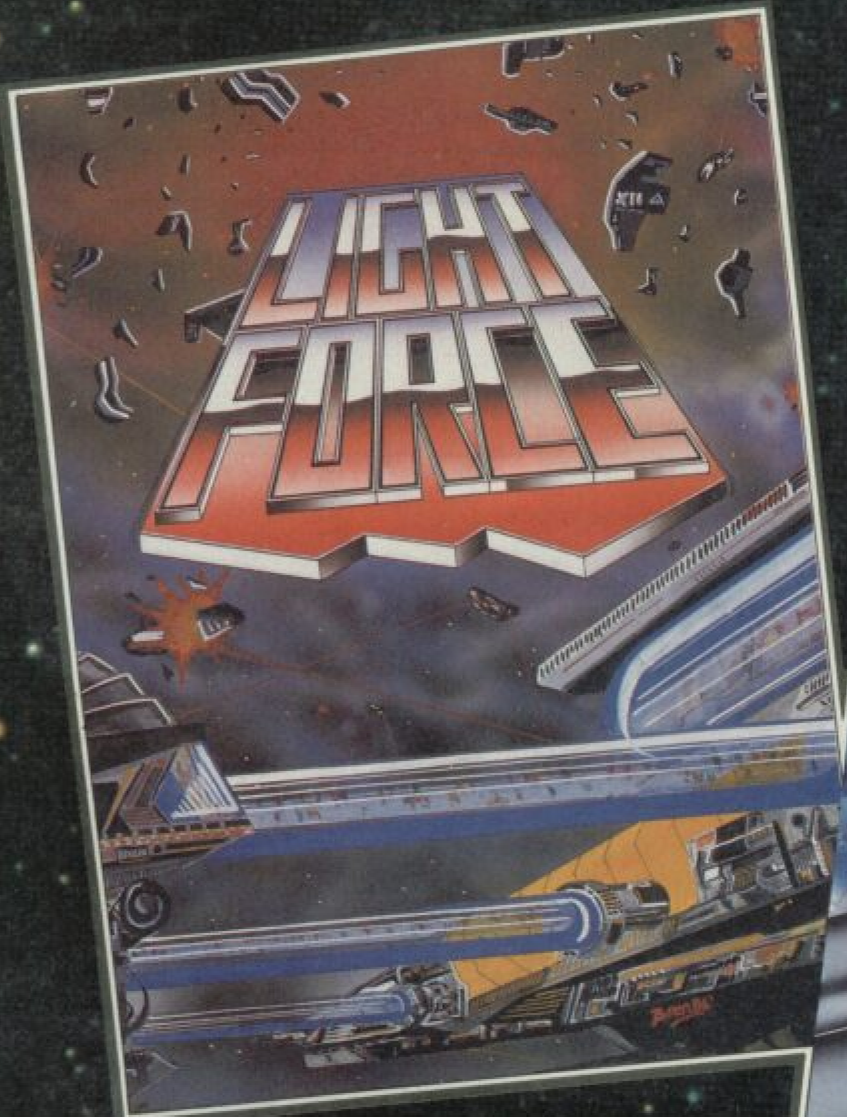
WORK-OUT TOOL-KIT

1	GRAPHIC ADVENTURE CREATOR	INCENTIVE
2	LASER GENIUS	OCEAN
3	ART STUDIO	RAINBIRD
4	ARCADE CREATOR	ARGUS PRESS
5	WHAM! THE MUSIC BOX	MELBOURNE HOUSE

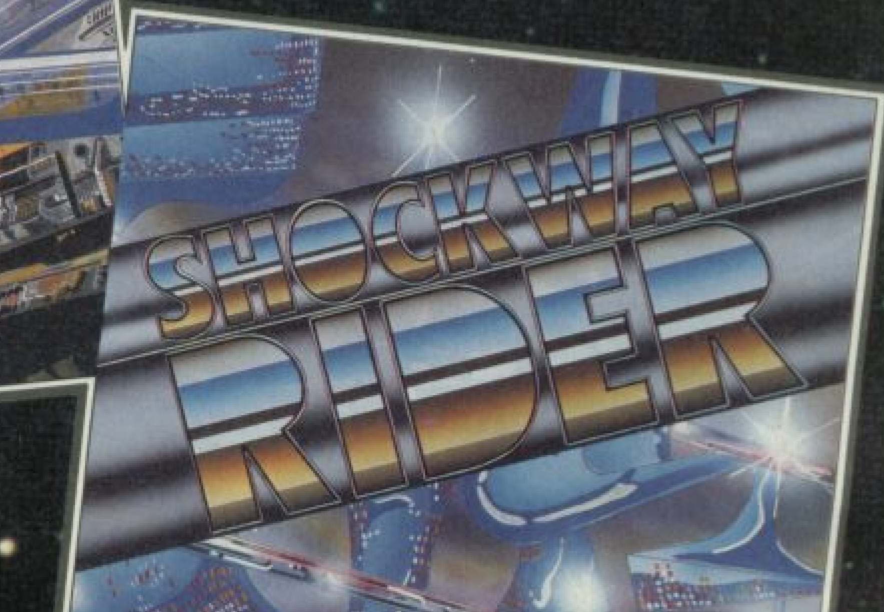
BUDGET £1.99 £2.99 SOFT WARE

1	NINJA MASTER	FIREBIRD
2	VIDEO OLYMPICS	MASTERTRONIC
3	MOLECULE MAN	MASTERTRONIC
4	KNIGHT TYME	MASTERTRONIC
5	REBEL STAR	FIREBIRD

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LIGHTFORCE is for **VENGEANCE**...........
LIGHTFORCE is the Punishment Arm of Galactic Fighter Command.
When a Terran-settled system at the edge of the galaxy is seized by an alien force,revenge comes in the form of a lone **LIGHTFORCE** fighter.
LIGHTFORCE confronts alien in a dazzling battle above the strange landscapes of the Ice-Planet,the Jungle Planet,Alien factories and the impassable Asteroid Belt.
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LETTERS

Confusion of Classics

I HAVE a minor grumble about your reviews. According to the ratings tables, a program receiving five stars is, 'Solid gold. Buy it!'

In the August issue, and this is just an example, there were no less than 12 of these 'Solid Gold' programs for the Spectrum — seven of them Classics. Their total cost was £102.52.

Now, I will want to buy at least one of these programs — but definitely not all £105 worth of them. How can I tell which are the best and worst of these dozen programs? Chose one randomly and I could risk wasting up to £15!

Please could your reviewers be more selective in giving five-star marks or the Classic accolade — or even, dare I say it, abandon the star system altogether, in favour of one that offers a broader scope.

The reviews themselves are generally of a high standard and I feel the ratings should be of a corresponding quality.

K J Mitchinson
Billericay
Essex

● *It all depends on the month. In September there were only five 5-star titles and only three classics.*

With all the many kinds of game (not to mention utilities and toolkits) it's not unusual for more than one really good piece of software to appear in the same month. ***Heartland*** *was an example of a top class arcade adventure while* ***The Boggit*** *is the best humorous adventure you're likely to find.*

We do not expect people to buy every Classic, it's a symbol to draw your attention to a product of exceptional quality. The rest of the review and the screen shots provide the information on which to choose.

Of things to come . . .

IT WOULD be 10^{10} pities if Sir Clive and Mr Alan cannot between them find a way to get the Loki on to the market.

It is obvious from correspondence that up and down the country, tens of thousands of us are stuffing a fiver a week, taken out of beer/church-collection/housekeeping/dinner/petrol/pocket money into abandoned games-cassette cases, or under the feet of our monitors to save up for one when it comes on the market.

If and when it appears, both in Cambridge, England, and Cambridge, Massachsets (or wherever Commodores come from) there will be wailing and gnashing of teeth, perhaps factories for sale. Cannot C and A get together and form a consortium to produce and market it? I'm sure they can.

To them I would say, forget the built-in tape deck and spend the money on a first-rate set of keys, and someone show Sir Clive a D plug, a far better way of connecting peripherals which would only add a pound or two to the cost.

Get Drs Logan and O'Hara to check out the Rom, and does the clock have to come down to 3.5 MHz for all 48K programs? (I appreciate it would need to for some operations). **Tasword II** is sometimes a little slow, excellent program though it is.

If the Rasterop and other hardware is difficult to design or make, why not two or even three Z80Hs working together? And how about a port to enable the user to switch the clock speed or bring in alternative Roms (eg for CP/M, Forth or Homebrew)?

Roll your sleeves up, gentlemen, be sure the situation is being watched by the Sony's, Hitachi's, Pioneer's and Casio's, eager to see an MSX micro a top seller. Don't let them get there in front of you. It's now or never!

E J Seymour
Emsworth
Hampshire

● *Must be worth a glance at the new +2, eh E J. Not a Loki perhaps but certainly a step in the right direction. Doubtless Tokyo has the specifications.*



Spectrum 128K+2

The point of Spike

I HAVE played quite a few budget priced games and found in general that they are good value for money.

The one that Graham Taylor reviewed called **Spike**, I have completed several times, and it hadn't occurred to me that it was similar to **Manic Miner** in so many ways, but I must agree with him now that he has pointed out certain features.

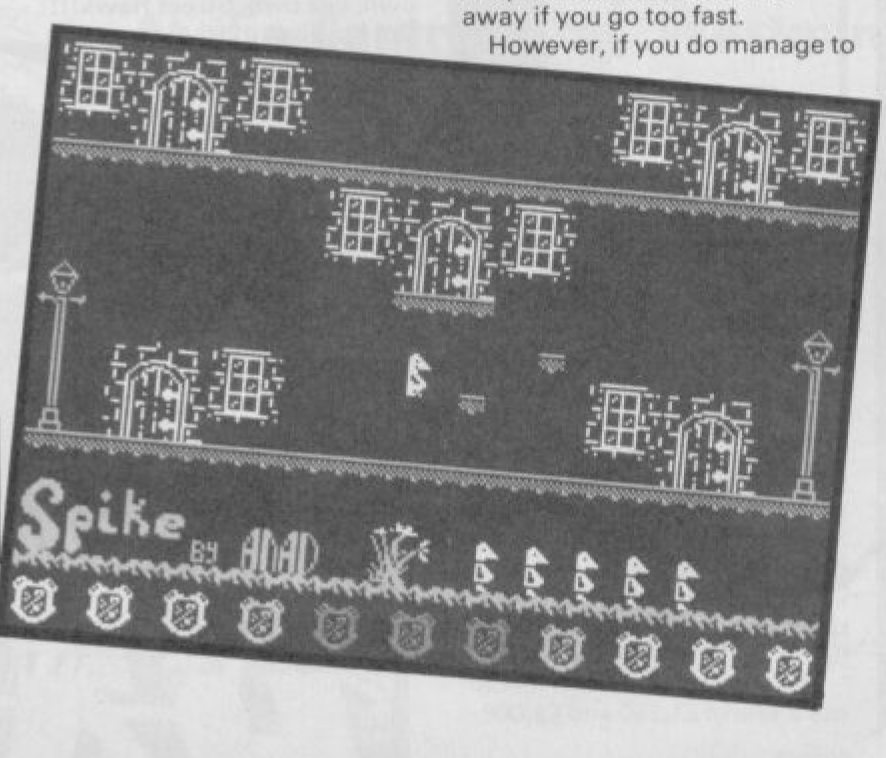
What made me think it was original was the Magic Sphere and what you could do with it. For a start, when you have found it, you have to coax it to follow you. This is not always easy as it sometimes drifts away if you go too fast.

However, if you do manage to get it to the last room, Hall of Dreams, you must get it to stay on the plinth and then climb the steps to reach one of the switches in order to activate the machine to carry out your wish.

The choice of rewards is a little sexist but I didn't find it offensive.

Annette Adams
Harlington
Beds

● *'Ere Graham, you didn't mention anything sexist about* ***Spike*** *— ed*



£10 prize loser

DEAR annonymous person who reads the leters, (byn the way who are you?)

I just thought I'd write to ask a few things:

1) Why on why do you never put the list of prize-winners names in alphabetical order? This would save many a wasted hour hunting through hundreds of small print names looking for my name and never finding it.

2) Who was the man at the *SU* stall at the Micro Fair — you know the one with the glasses, and who was the young lady with him?

3) Is Andrew Hewson's head really that big when compared to his body in his portrait on the Helpline page, or has the artist got a personal vendetta against the poor bloke?

Gary Williams
London SW16

PS. I bet you a tenner you won't print this letter because I'm not from Sweden, Norway or anywhere else for that matter and because I'm not writing about software piracy — I mean, c'mon guys, all the letters are bringing me down — yapping on an on.

● *You owe us £10. (1) You want to come up and put them in order for us? (2) Can't give you clues for our comps on page 81 (3) The Mad Celt has a vendetta against everybody.*

LETTERS

Lonely ROMs

I WANT to swap programs with users all over the world. I have a selection for the Spectrum and CBM64.
Santiago Cano Gallardo,
C/Cristobal Colon No, 17-3,
11005 Cadiz,
Spain

HEY everybody, who owns a 48K Spectrum. I would like to write and exchange Pokes, programs and other things. I'm 16-years-old, if you are interested then write to:
Jacob Pilegaard,
Hojskolevej 9,
5882 Vejstrup,
Denmark

I AM 14-years-old and would like someone of about my age to swap playing tips and programs with. I own a 48K Spectrum and well over 50 games.
Ivan Morris,
9 Pump Lane,
Greasby,
Wirral,
Merseyside L49 3PW

BEING a 12-year-old computer addicted genius, I am searching for a boy pen-friend anywhere around the world. I am willing to swap games and Pokes etc, and I'm particularly interested in adventures. I own a 48K Spectrum.
Mark Kelly,
19 Brookland Road,
Weston-Super-Mare,
Avon BS22 8LS

I OWN a 48K Spectrum and I'd like to contct other Spectrum owners around the world. I have a lot of games.
Ludovic Barucie,
37 Rue Jean Maulin,
Les Essarts,
76530 Grand Coursomme,
France

ENGLISH pen-pal wanted. Male or female aged about 14 who would like to swap games, Pokes and maps.
Ronnie Nilsson,
Kallgatan 2
82700 Ljusdal
Sweden

I WOULD like a penfriend whom I can swap programs, ideas with. I am 17 and own a 48K Spectrum.
Andres Markus Arnarsson,
Grytubakka G,
109 Reykjavik,
Iceland

I AM a 15-year-old Spectrum owner. I would like to have a pen-friend from a Western Country. He or she may be the same age as I am, and willing to keep up correspondence and exchange software.
Vladimir Blazek,
Sarecka ul 33,
160 00 Prague 6,
Czechoslovakia

MY NAME is Imran Iftikhar and I'm 14-years-old. I would like a pen-friend to swap games and programs with.
36-D Peoples Colony,
Faisalabad,
Pakistan

Terrific feet

DEAR Sinkler Yusur

Wy isit that evry ishu uf yor mag that I reed is teeming with speling mustakes. I meen wot wur yu orl duing wen that nice teecher at the frunt wus holding up orl thoze culerful reeding kards?

I think it's that narsty darnsing oger hoo branewashes you with his myndliss jiburings evry munth. If hee is the cauz then cood yu kyndlee sakrifyce him too the powurs that bee in his bear beley.

Ashley Williams
Banbury
Oxon

New Ed offer

I WOULD like to congratulate you on the alterations made to the mag in the August issue of *Sinclair User.*

It's brill. Zap Chat is mega-fantastic, with more Pokes and better tips. The top 20 is excellent.

But the Facts Boxes could be better, change them to a percentage.

All we need now is me as The Ed!! Oh well, Byee.

Stuart Thompson
Coedpoeth
Wrexham



A hack in time

WHILE looking through *Sinclair User* (June '86) I felt I had to say something about your news report on the prestel hackers. I'd like to congratulate them on proving how slack Prestel security really is and questionaing the safety of the IDs of all the Prestel users.

The hackers deserve a medal not a fine of £1,350 and £2,000 costs. It's disgusting. Prestel, instead of proudly displaying themselves in magazines, should spend more time securing their system.

RAH
Penn
Wolverhampton

The great 128 conspiracy

IN THE light of recent speculation of the possible release of the Loki or not and recent readers' comments (August issue), I would like to ask are magazines and companies in collusion with press coverage of these types of products?

Before I bought a micro I read magazines, listened to this advice and eventually purchased a Spectrum Plus. Low and behold three weeks later, there, in Dixons in Kingston, was a new 128.

My point is will the Loki or a Sugar form suddenly appear in the shops — after enough 128s have been sold, of course?

Ian Phillimore
New Malden
Surrey

PS. At least I can understand your magazine, dispite not being a computer person, so keep up the good work.

● *Shock! Collusion? Absolutely not. At the end of the day launch dates are subject to the whims of the computer magnates, and even our scoop-oriented hacks can't always weedle precise dates.*

Hawk on the streets

I CLAIM to be the first person to own, yes own, **Street Hawk**!!!! But how can this be, I here you ask.

Simple, I bought a version of the never-released program off my friend for the staggering price of £2.00. But don't buy it, it's c★★p. UDG style graphics, and it repeats itself.

Stuart Thompson
Wrexham
Clywd

Spellbound by budget games

IN REPLY to your request for the ever increasingly extremist views on budget software, I would like to say a few words.

First of all, even though there are some very bad budget games on the market, what K Gal (August issue) is forgetting, are games like **Spellbound** and **Knight Tyme**.

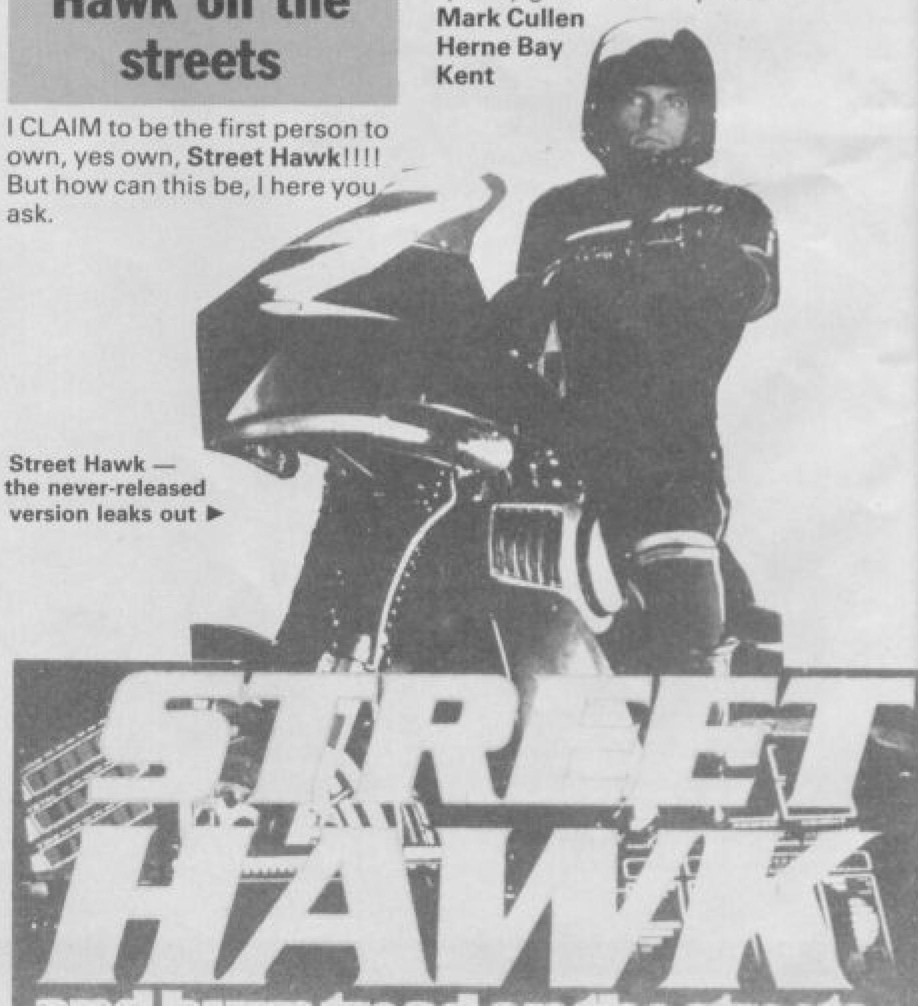
Even **Finders Keepers**, which he mentions, cannot be regarded as cheap trash. These games have good graphics and animation with superb plot and gameplay.

When budget software was first released, even I was dubious about buying such simplistic excuses for games. Indeed, in some cases, these games have pushed back the frontiers of software development.

As a result I am much more willing to risk £2-3 on a budget game than to fork out nearly £10 on something like **World Cup Carnival** in the vain hope that it will be a quality game.

We do not even need to buy less to push prices down if, as Mastertronic has proved, companies could produce quality games at low prices.

Mark Cullen
Herne Bay
Kent



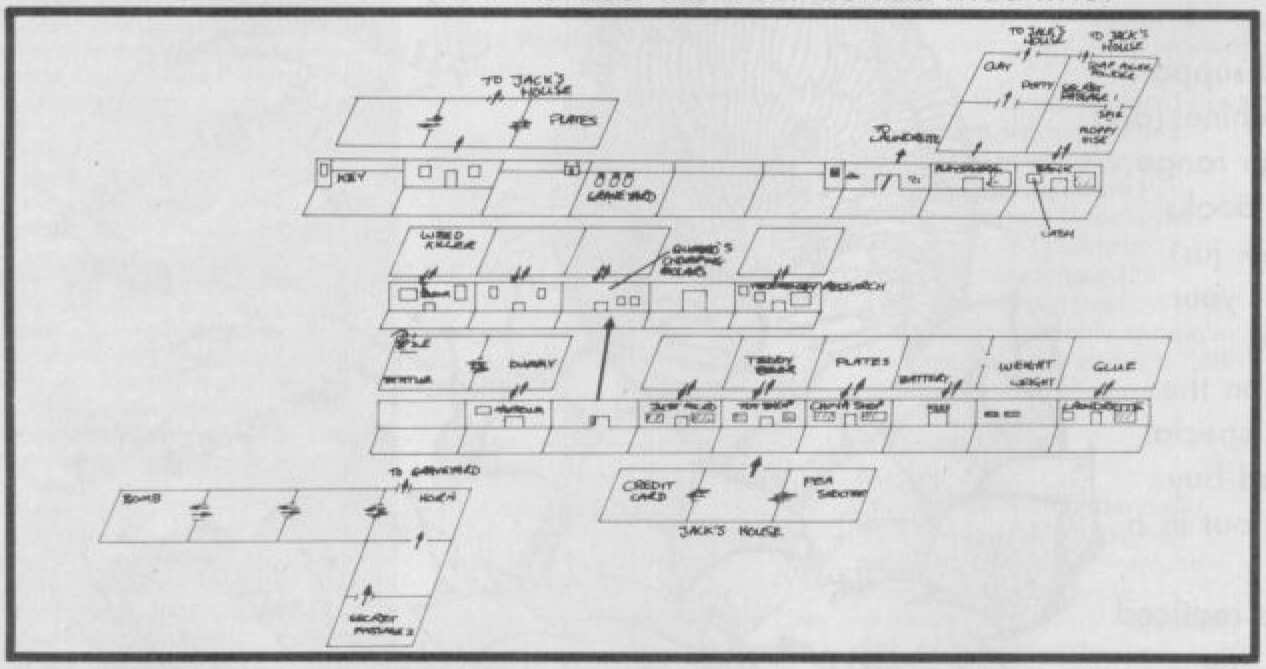
Street Hawk — the never-released version leaks out ▶

JON RIGLAR'S ZA CH



Yup, it's coming up to my birthday and to celebrate it the local job centre sent me five YTS schemesters. After re-decorating my bedroom 4 times, they decided to convert the top floor of my house into offices. Once the dust had settled, desks were installed and the next thing I knew, a proposal for the setting up of a Tips Team was handed to me.

No, I thought, no chance. The Team will be introduced later once I've worked out how to use the new coffee machine.



▲ Jack the Nipper

In my opinion is one of the best games around right now. So here's a bumper edition of tips.

● First the obvious. Avoid all humans, dogs, cats, plants, the cooker, plants, radiators, and fireplaces

● When in the bedroom, jump on to the chest of drawers and then over to the bed via the post. Jump across over to the other post and finally up to the shelf where you can pick up the pea-shooter

● Get the battery from the Police Station (quick, duck lads) and trudge off to the Just Micro store. Watch out for low-flying owls as you walk past the counter towards the panel. When you've done this, the BBC micros all short and the irate shopkeeper chases you away. Hopefully that should cut down the number of telly progs done about the old Beeb

● Go to the China Shoppe and jump up on the counter. Clamber on to the till and then bounce up to the high shelf where you can grab a china plate. Throw this to the floor and repeat the procedure for the other plate

● Get the glue from the launderette (borrowed from Eastenders) and toddle off to the local false teeth shop. Jump up on to the teeth and the next thing you know the teeth are all stuck down

● Pop along to the garden shop where you can get the pest killer by jumping on to the counter and then to the shelf. Take this along to the garden. Make sure you're in the right section and then drop bottles on the plants. Then scarper

● Collect the key from the garden and go along to the museum where, for some reason, the radiator has gone hay-wire. You can dive in behind it and this leads to a platform game where the object is simply to get to the top of the screen via, you've guessed it, platforms. When you have completed this screen you drop into a room to land painfully on a fireplace. Jump off or you'll get singed. Once in this house, search for the horn

● When you have the horn, search around for a slumbering cat. Walk up to it and fire the horn at its eardrums. Suddenly it decides it does not want to sleep anymore and jumps up to the ceiling

● Go along to the Police Station (oh no, not again) and get the weight from the jail. Trudge merrily off to the Hummo Sock factory, where you can jump up and flatten all the socks

● Once you have the key, go to the bank and into the platform screen, behind the radiators. Complete the screen and you should appear on top of a cupboard. Collect the credit card and then go to the bank. Jump up to the cashpoint and you'll find it goes hay-wire. I tried this outside my bank, but found it wouldn't let me take any money out, as usual

● Get the disc from behind the radiator in the bank and trudge (I like that word) over to the Tech Research office. Jump up at the single computer and this fouls up the whole shop

● Grab the packet of Omo from the platform screen and trudge (that word again) off to the Launderette. Run along in front of the washing machines and muck them all up. Watch out for Dot though

● When you have found the bomb get along to the Police Station (it was nuffing to do with me Hofficer, it was 'im as well) and drop the bomb once you are in the jailroom. Puff, goes the bomb, and the next thing that happens is that the nasty prisoners trudge all over you

● Annoying the garden keeper can be fun. You need to get the fertilizer (Oo arr, me bumpkin etc...) from the graveyard. To do this, you need to shoot the ghost that attacks you. Pick up the fertilizer and drop it on the previously destroyed flowers

● Grab the clay from the Playskool and drop it in a nearby room. Watch what happens

● Take the potty from the Playskool and go to the China Shoppe and drop it. See what happens . . .

● Avoid the cemetery altogether.





AP
AT

I'd better mention some names, S Hall wrote to ask about Clare Edgeley. He says: "She must be completely stoopid. She obviously doesn't use a dictionary when writing her reviews." Clare using a dictionary? Unheard of. Besides, she gets confused when she tries to remember which magazine she is writing for and whether the kettle has boiled yet.

Also a letter from John 'ZX Zapper' Rose, who goes down on his knees to grovel. He scribbles to say that Teresa Maughan could possibly, in his opinion, be more devine than Clare. So you know where to send your letter bombs.

Talking of nasty letters, I am cheesed off with letters wrongly addressed to me. My name seems to be causing problems. It ranges from John Riglar and a Jon Wriggler, even Jon Regular and a Jon Irregular. My personal favourite's are Lord Jon and Jon 'Incredibly Talented' Riglar (I'm so modest).

Jack the Nipper's amazing map was completed and compiled by millions of people including Neil Griffiths from Cardiff, Jimmy D from York, David Cattanach from Sussex, David Jonson from Oxon. There were loads of different versions and the team decided to draw their own with bits from them all, Col 'mechanic' Leeds was promoted to art director and given (and he never thanked me) a brand new pencil to do the job.

KEY TO MAP:
SP1: Secret passage One. SP2: Secret passage Two.

Ladies and Gentlemen-...Jon 'Scoop' Riglar proudly presents to you the Zap Chax Tips Team. Just think yourself lucky that you haven't got to look at them. Or, come to that, listen to their tales of their daring deeds with a Dragon 32. The high point of Col's year so far was when he actually got a game to load . . . Col, best known for his attempt at building an outdoor railway with only 2 feet of rusted track, has written for a well known Dragon magazine in which he pretends to be a female agony aunt.

In charge of Research (or so he thinks) is Mark 'Oh, well' Taylor. Mark, who lost the eight locations in *Jack the Nipper*, is well known for his Saturday morning video shows, at which he raises enough pennies to fork out and buy packets of Juicy Fruit chewing gum which he hopes will last until the following Saturday.

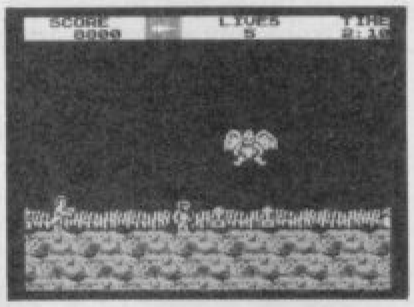
Other characters that occasionally grace the portals of the team's office include Darren 'Commode' Rae, the official bodyguard and coffee prep. In charge of incoming mail is Helga 'Grannyknot' Brunkett, secretary and female wrestler. Then there's the censored man himself, Shaun Downend, who buys the budget software and, not forgetting, the pasties. On brief occasions it has been known for Matthew 'Spandau' Norman to come into work on time and without uttering one single word on the latest Amstrad news. Matthew's favourite pastime is Spanish mud wrestling and I'm told he does this several times a week. That explains a lot of things . . . Finally, there's the driving force himself, Jon 'Scoop' Riglar. Jon is the only person who does any work and has admitted to being a coffee addict. After consuming several cups, he can be quite sane. Jon's favourite pastime is playing *Blue Spanish Eyes* on his bass guitar to anybody who pops into the Scoop' office.

Ghosts 'n' Goblins

Dave grumbles down the phone whilst drinking a cup of coffee and slurping most of it over the receiver, "Write something good about it".

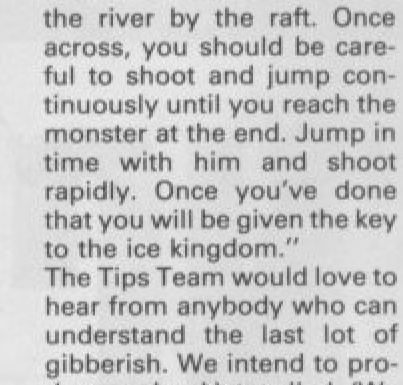
Amongst the pile of letters I've received on the subject, I noticed one from Spandau. Taking into account the fact that his desk is just opposite to mine, I telephoned his psychiatrist to check the mental state of Norm. Norm wrote in large printed letters how to complete the first stage. It took me two hours to translate his letter into understandable English, and still it is shoddily written. Chocks away chaps . . .

"First of all, you must remember to keep the dagger as your weapon as you will need to use it against the devil. Proceed along the graveyard, jumping over the gravestones and shooting any molesting zombies. You will then come to a screen



with a ladder. here you must immediatelty kill the little bird or else it will crash into you. Once the bird has been disposed of, jump up quickly to the ladder and then up to a higher level. Once you are at the top, you must instantly jump up into the air and shoot the plant to the right of you. This is a multiple hit monster and needs to be hit again when you land. Then cautiously proceed along this level until you see the next birdie (he wrote that honestly) partially appear on the side of the screen. You may then shoot the birdie and the nasty plant behind it. When you come to the end of this higher level, fall back down to ground level, be carful to turn left immediately and shoot the bird that is sitting on the gravestone reading. You can then carry on across this level until you come to the little devil. Shoot rapidly and jump around. Once he has been disposed of, you can go on to kill the next bird and cross the river by the raft. Once across, you should be careful to shoot and jump continuously until you reach the monster at the end. Jump in time with him and shoot rapidly. Once you've done that you will be given the key to the ice kingdom."

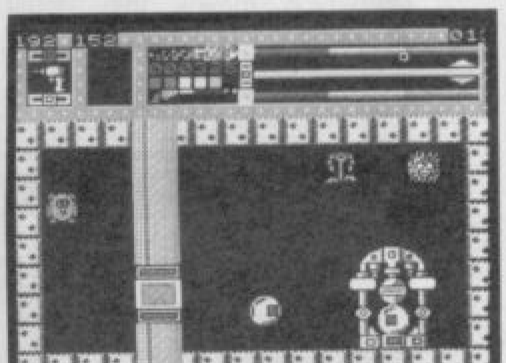
The Tips Team would love to hear from anybody who can understand the last lot of gibberish. We intend to produce a booklet called 'We can speak Norman' and hopefully get it published in paperback.

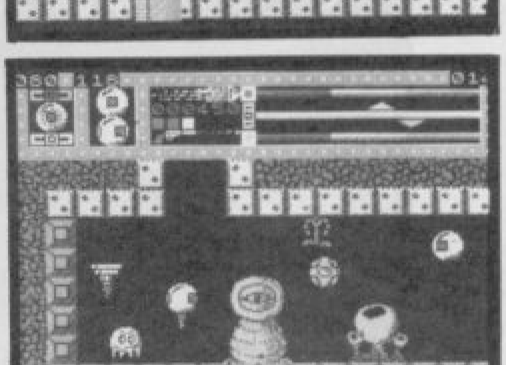


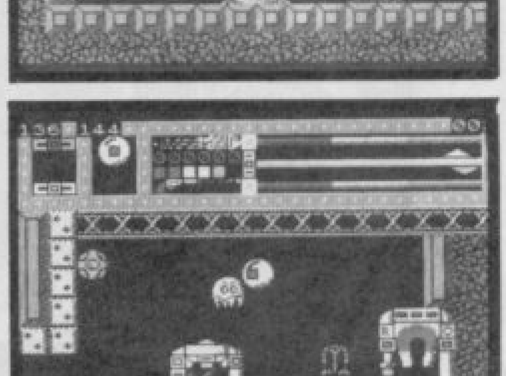
Equinox

is getting some attention. Here are tips on level one and how to complete it. Norman's going to take over and so I hope you have your paperback translation books handy.

Firstly get the teleporter credit and trudge (that word) around until you find the teleporter itself. Pay the teleporter the credit and zoom off to the room which contains the drill. Pick it up and teleport back. now search the level until you find the dynamite which is housed inside a case. A quick tip is to use the magnetic lift to get to the dynamite. Use the drill to get through to the dynamite and pick it up. Now find the pile of rubble which needs to be cleared using the explosives. grab a nearby teleporter credit and pay the same teleporter as before. Now bounce back to the area where you found the credit and continue upwards until you come to the canister itself. needless to say, take it and go back to the teleporter where you can zoom off to the disposal chute. By doing this, you will see the canister appear in the store chamber and thus you have completed level 1.







JON RIGLAR'S ZAP CHAT

Quazatron

has provoked a letter from Carl Knotts, who writes to answer Neil Caldicott's plea for somebody to come forward and identify the strange flashing blue light. This plea was printed yonks ago and yet nobody came forward until now. Over to Carl: "Neil appears to have come across a droid which has a disruptor as it's weapon. It causes a massive energy drain and covers the entire screen. It is represented by a sharp flash. I have found that the only way to escape from it's effect is to either have an extremely strong power unit, or disruptor sheild." Now we all know. Yawn. Hope that cleared up a few arguments between irate letter writers. Carl has not finished, though: "If I remember correctly, the B2 battle droids usually have disruptors, which means they must have one or both of the said devices. They must be immune to their own weapons after all."

"Steven Randy is absolutely right — the disintregator is easily the best weapon to use — but make sure your power unit can cope. Dual lasers are indeed extremely useful, but not all repair droids carry them. Logic droids, I have found, are nothing but trouble — they are extremely quick. If you grapple with one, grab its drive and power units — they have got me out of many a tight scrape. *Quazatron* is the best game I have ever seen, and **Sinclair User** is the most fabulous mag out."

I had a shock of my life when I received a letter from Jeffrey Baxter who claims to be the voice of the people. he wrote an extremely puzzling letter and didn't really mention any game at all. he did, however, send in some low scores. Taking into account the fact that he is Celtic and only has three brain cells purchased after the sell-by date from Tandy, it is not surprising that he can only achieve 24% in *Jack the Nipper*. He is also puzzled by the fact that he cannot get out of the first location in *The Boggit*. This is not the Adventure Helpline, Jef.

The 'Scoop' Team were pleased to receive a 'Congratulations' postcard delivered from downstairs by Helga. Rumours roared around the office and people started saying "Who's engaged? or "When's the wedding?" After checking the card for any contagious diseases it was past hurredly around for everyone to have a butchers. It all turned out to be rather disappointing. There was no hint of scandal at all. Instead, the card came from Marcus Emery who sent it in to congratulate himslef on acheiving a boring old high score. Smug Devil. Marcus says that he has completed Gremlin Graphics *Bounder*. He did it with a truly amazing high score, 1,237,660.

QUICK TIP CORNER

- ***BIGGLES*** **The team has received several letters suggesting at least three different passwords allowing you to go on to the second side-because I've got a preview copy, I can do that anyway. One of the most popular codes and one that does work, is DADD**
- ***JET SET WILLY*** **Try typing in the word WRITETYPER and see what it does. Also try TYPEWRITER in** ***Manic Miner.*** **Remember that these are for the Software Project's versions only**
- ***STARSTRIKE*** **Old, but still a goodie. Type I WANNA CHEAT for infinite energy. When you are fed up with cheating, then type BORED**
- ***STARSTRIKE II*** **Type HEAR AND OBEY for infinite everything**

Seeing as it's coming up to my birthday I'd like to get rid of the team for a while and invite you, yes you, to write a short article concerning recent games and to send it to me. It can be a map or whatever as long as it's up to date. Those who send in stuff could find themselves in possesion of a large size T-shirt.

We are not interested in high scores, but would like decent tips of recent releases. To be eligable to enter you mustn't be an employee of EMAP and have a vocabulary of not more than 10 words. You should also have a sense of humour as it is quite likely that we'll take the mickey out of the things you say. So, if you can have the sudden insane desire to join the Tips Team for a month, get cracking and write something incredibly trendy. People of Celtish decent will be considered by an un-biased person outside the office.

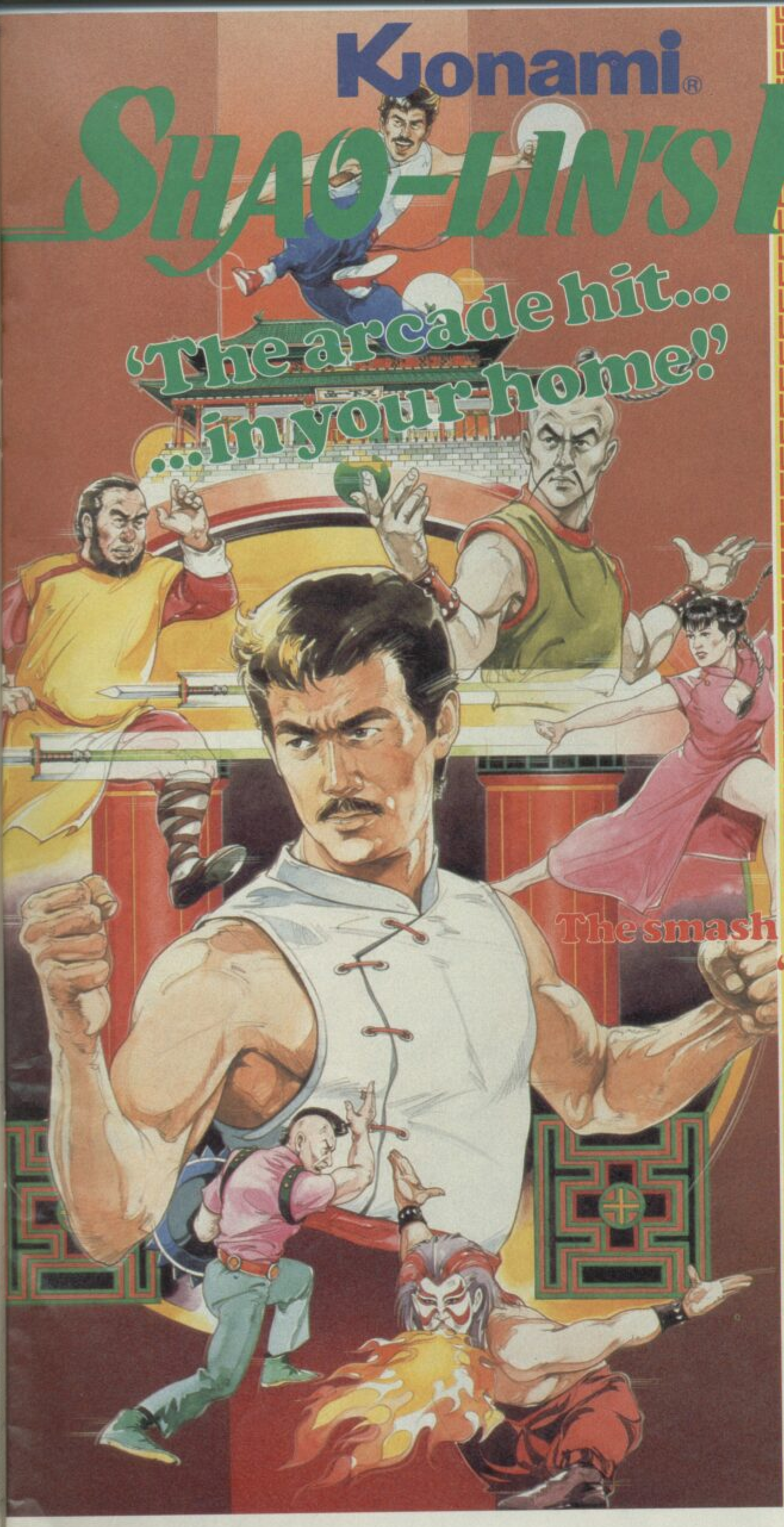
Right, coffee break over, and so back to work.

That's it then, The team are now waiting in anticipation for the next issue to be published so they can play spot the mistakes. *Turbo Espirit* indeed. See you next month.

Whatever you want to say, say it to: Jon Riglar, *Zapchat, Sinclair User*, 30-32 Farringdon Lane, London EC1R 3AU.

Konami®

SHAO-LIN'S ROAD™







Screen shots from arcade version – home micro versions may differ.

The smash hit follow up to 'Yie Ar Kung-Fu'

Spectrum
Commodore 64
and
Amstrad versions
coming soon.

Our hero has finally mastered the secret martial art "CHIN'S SHAO-LIN" but is trapped by triad gangs. With kicks and other secret powers, escape from and travel SHAO-LIN'S road to freedom!

THE EDGE

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Tel: (01) 831 1801 TX: 892379.

AMSTRAD REFORMS SINCLAIR

Malcolm Miller is the marketing director of Amstrad, he is number two to Alan Sugar and he is currently overseeing the launch of a new computer. It's called the Sinclair Spectrum 128K Plus Two and Graham Taylor thought it might be worth talking to him . . .

Malcolm Miller won't waste words. Like his boss Alan Sugar, when the answer is yes it's just 'yes'. No is simply 'no'.

He is not in fact arrogant, as it first seems, just very direct. If he thinks it reasonable he'll answer your question but he won't help you with quotable quotes. He isn't exactly easy to talk to but he isn't unfair either, which is fortunate really because, as Alan Sugar's right-hand man, Malcolm Miller is currently overseeing the launch of the most exciting new home micro this year — the Spectrum 128K Plus Two.

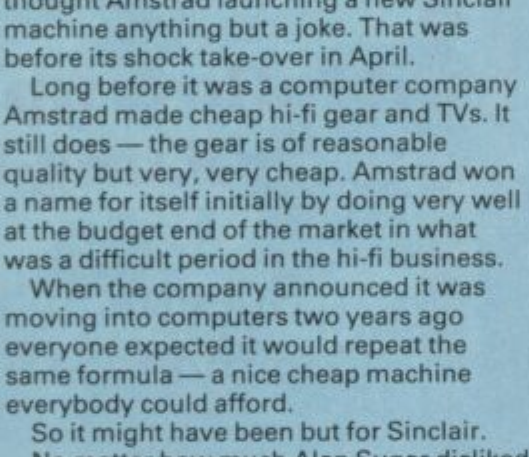
Six months ago no-one would have thought Amstrad launching a new Sinclair machine anything but a joke. That was before its shock take-over in April.

Long before it was a computer company Amstrad made cheap hi-fi gear and TVs. It still does — the gear is of reasonable quality but very, very cheap. Amstrad won a name for itself initially by doing very well at the budget end of the market in what was a difficult period in the hi-fi business.

When the company announced it was moving into computers two years ago everyone expected it would repeat the same formula — a nice cheap machine everybody could afford.

So it might have been but for Sinclair.

No matter how much Alan Sugar disliked all those leads and plugs and separate bits



and pieces of the Spectrum, there was no getting away from the fact that Sinclair had the low-end sewn up.

So Amstrad produced instead the CPC 464, a computer with built-in tape machine and bundled colour monitor. At around £350 it was comparatively expensive and Malcolm Miller explains it thus: "We looked where we could operate best and provide added value — that led us to the bundled cassette drive and monitor and we produced what ended up as a fairly up-market machine. Throughout we consciously did not attract the lower end games entertainment users simply because the Sinclair Spectrum was already catering for them very well.

"The idea of entering the low end of the market really occurred quite late on in Amstrad's computer history — previously we had been occupied with the success of the CPC464 and the 6128. We eventually decided that we needed a Sinclair style product. Maybe a knocked down 464," he pauses, "or the Sinclair product itself."

Amstrad prides itself on a very close relationship with its dealers, and it was whispers from them about the unstable financial state of Sinclair combined with the wish to move into the low end of the market that made the Sinclair deal happen. "It was no secret they were having problems. Their problems and our efforts to capture the lower end of the market just moved together at the right time."

The new machine looks good (see the full review, this issue) but Sinclair credibility was at a pretty low ebb when Amstrad took over. A lot had to be done in only a few months. There were technical problems with matching a cassette recorder with the computer and there were a good many consumer and trade questions which had to be answered associated with compatibility of the 128. Amstrad also saw an opportunity to improve the keyboard.

"We also had the marketing ability and the finance to actually advertise the product properly and give it good distribution."

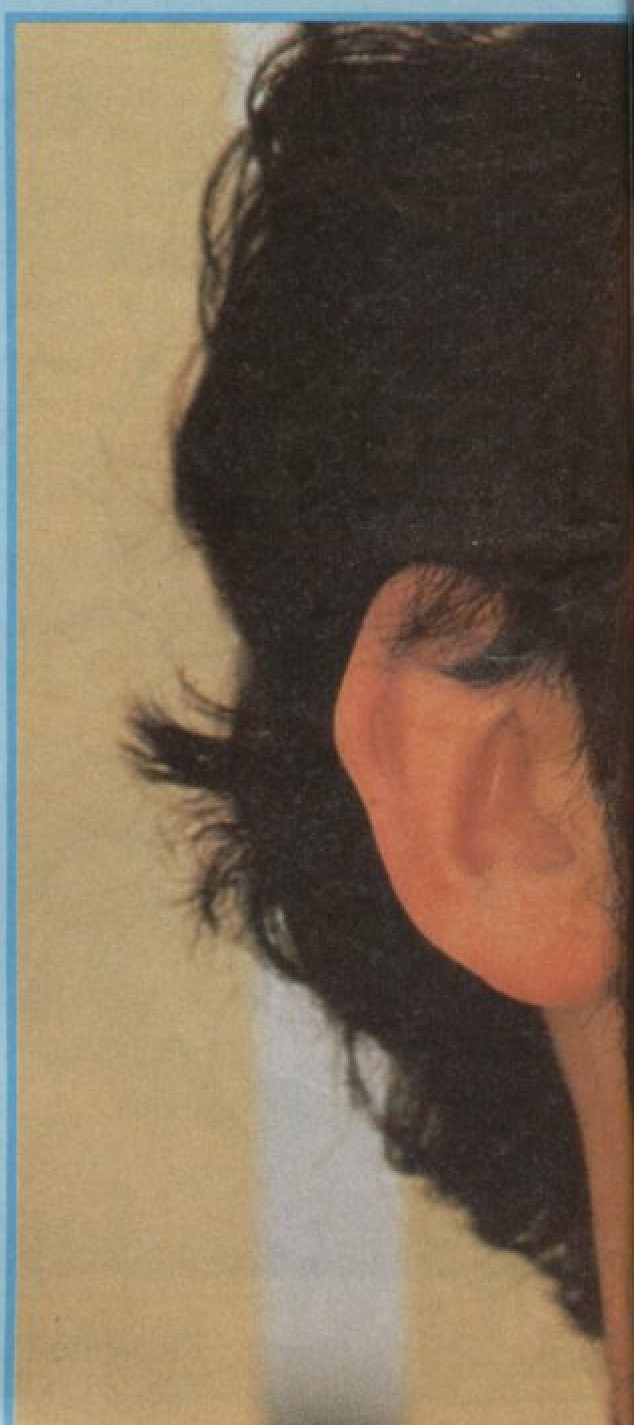
I trod carefully on to the subject of Amstrad's purchase price for Sinclair's products and brand name. On the face of it Amstrad got itself a bargain. It payed £12 million for the Sinclair name, the rights to use the technology of the biggest selling home computer, and a warehouse or two of existing Sinclair machines. Was it true that by selling the existing Sinclair stock alone Amstrad made a good deal of its purchase price back?

"What do you mean a good deal?" Over 50 per cent I suggest. Malcolm is clearly not going to give anything away. "I don't think we made extraordinary amounts of money from it, we came out fairly clean — I think that's all I can say — we had to sell the product off because we had the liability of the product." Make of that what you will.

The Plus Two is a thorough redesign of the 128 with a proper typewriter keyboard and a sturdy looking tape deck. Built in are twin joystick ports, a MIDI/RS232 socket and a numeric keypad slot.

Amstrad has retained the curious MIDI option found on the 128 for Plus Two. It allows primitive interfacing between the computer and electronic musical instruments. "I think that the consumers

> **"It was no secret that Sinclair were having problems. Their problems and our efforts to capture the low end of the market just moved together at the right time"**



are quite interested in music and it will develop. It is an interesting idea that hasn't yet been fully exploited." No definite hardware is planned at the moment though, according to Miller.

The twin joystick ports are obviously very welcome. Less welcome will be the news that they are Sinclair Interface Two standard not Kempston, more frequently used by existing software. Why wasn't Kempston chosen? "As I understand it there is Kempston and there is normal. On choosing ports at some point you have to make a decision otherwise there is no end to it." There's something of a politician in Miller.

The machine is being sold at £149 by Amstrad but many of the chain stores will be offering package deals including a new joystick and a six-pack of software selected by Amstrad. The pack will be sold for £159.

Amstrad doesn't intend to publish Spectrum software itself, as it has done with the CPC range. "It's not our plan to get heavily involved in the Spectrum market. If a really good title comes our way we might, but I think there are enough people out there publishing stuff that we don't need to."

The Plus Two will be heavily promoted in the run up to Christmas in the specialist press, newspapers and on TV. "We're stressing that it's a whole new product with a proper keyboard, a data-recorder and an enormous software library."

Part of the process of ensuring the old



Sinclair compatibility problems — as seen with the Spectrum 128 launch — are not repeated, is the setting up of Sinclair Quality Control, a system whereby software will be awarded a sticker which says the program is fully compatible if it loads with no problem on the machines. Something to watch out for when buying programs for the machine.

The new machine had to look right. Amstrad wanted to retain some of the best features of the Sinclair look but it also had to seem extremely smart, desirable and attractive — that's how it was designed.

"I think it had to look more of a machine, better value for money. It needed to look like it was a performer, but at the same time we had to get across the Sinclair name because it is a very good, highly desirable name, evoking some good responses. What we've ended up with not only looks good value for money, it is good value for money."

The retail trade had become more than a little suspicious of the Sinclair name so how had the trade reacted to the Plus Two? "They are very pleased. They know it's just the sort of product people are going to be demanding at Christmas."

That the Plus Two exists is a remarkable thing. Two years ago Z80 micros were supposed to have had their day. Sales were supposed to collapse when the day of the 68000 dawned. Amstrad always disagreed. Alan Sugar asked the obvious question: "Very nice, but why does anybody want to buy one?"

They didn't. The Plus Two reasserts the position of the Z80 with a vengeance and according to Malcolm Miller it won't be the end.

"The philosophy in product development is that one doesn't stand still. Always to look for better products, better value for the customer. You don't sit back and become complacent with a product that is three or four year old and let it die from competitive activity."

Could there be a Spectrum with discs? "We would consider that, yeah". Would you give it CP/M? "Could do." Wouldn't that tread on the toes of other Amstrad computers? "I don't think so — it'll just give a young person the chance to get into another area of software." What about microdrives? "What about microdrives?" he responds. Take that as a no.

What of other possible areas where the Sinclair name might be used. Sinclair is intended as the 'low-end' label. While the Amstrad name is becoming more and more associated with business/serious home machines.

One logical move, hinted at by Alan Sugar, might be a games machine. He is known to have been impressed by the Nintendo games console which has been doing very well in Japan.

"We will reserve the Sinclair name for the entertainment area and that could include a games console," says Miller, "but it remains to be seen how well the product will do in Europe — Europeans tend to think that the equipment has to educate as well as entertain. If we do one, though, it'll be Sinclair."

The Spectrum 128K Plus Two will, in all likelihood, be very successful. It looks . . . well . . . right. As Sir Clive himself said in so many words in this magazine, Sinclair Research could innovate but Amstrad know how to market. For the moment they can do no wrong.

Maybe the secret of Amstrad's success is its absolute confidence in its ability to make decisions. The right decisions. Try the following exchange which arose when I asked Malcolm Miller to describe how Amstrad set about transforming the old Spectrum into the new machine:

"We gave it to our engineers . . ."

And they told you what was possible?

"And we told them what we wanted and they did it."

That was adding a tape machine and a proper keyboard?

"Yes."

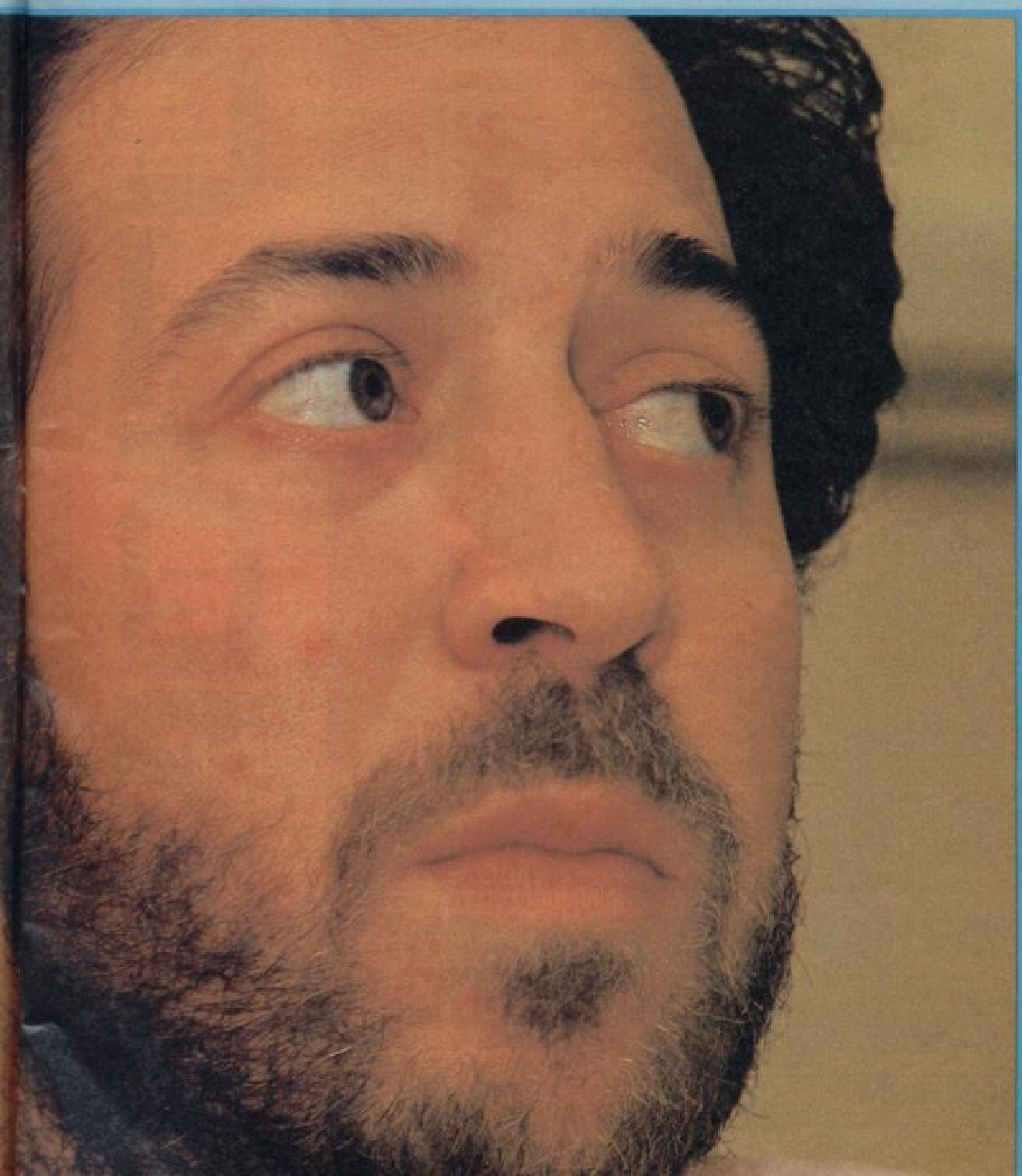
It was completely obvious?

"Completely."

Did it come in at the price you planned?

"Yeah."

Malcolm Miller doesn't waste words.



BULLETIN BOARD TOP 10

Here it is, the Sinclair User Good Bulletin Board Guide. Finding the juicy BB numbers amongst the dross is a tiring business so we've done it for you.

The top ten boards below provide the best in entertainment, local information, and specialist expert systems all of which are free.

We've even provided a rating, between one and five, to show which boards are the best of the best ■

NAME: Gnome at Home (GAH)
TELEPHONE: (01) 888 8894
SYSOP: Migrognome

Features the latest product gnews which includes facts peppered by riotous editorial. Communicado features modems, comms software and special offers on equipment. If you take out a GAH subscription you can join the



Comsoft User Group and share the secrets of hacking with other members. Gnomes can also play chess — one move a week, read the gossip column or page up the soapboxes on politics, religion et al

RATING: ★★★★★

NAME: Communitel
TELEPHONE: (01) 968 7402
SYSOP: Igor Thomas

Has an art gallery to which you can add, a star sign astrological profile analyser, telesoftware and information about other bulletin boards and information databases around Britain including libraries.

A limited selection of telesoftware is available free of charge.

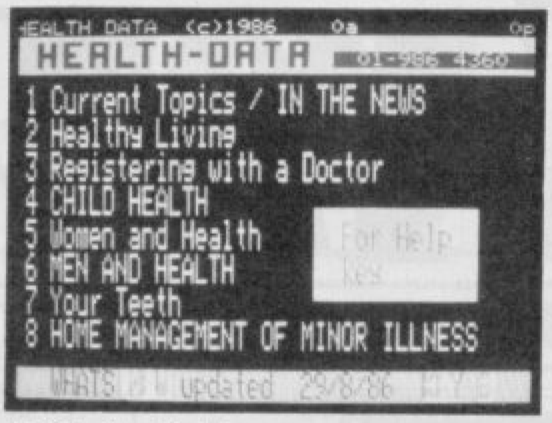
The Communitel message board can be used to send messages to other boarders or to the Sysop

RATING: ★★★★☆

NAME: Basildon ITEC
TELEPHONE: 0268 22177
SYSOP: Tony Dwyer

Provides much local news and current event information but is also of interest to boarders country-wide. There's a message board facility, advertisements for computer equipment and classified ads — to which you can add your own on-line. The graphics area contains some neat designs, such as an owl and squirrel, but I'm sure you could do better. The system is also currently being overhauled, so be patient if there are features to which you cannot get. It will soon be bigger and better

RATING: ★★★★☆



NAME: Healthdata
TELEPHONE: (01) 986 4360
SYSOP: Dr C J Dobbing

No fooling around on this one please, it's a serious application and should be treated with courtesy and respect.

Healthdata provides a simple expert data base with information on common health complaints and how to deal with them. One useful section shows how to treat simple illnesses, such as flu, back pain and hayfever

RATING: ★★★☆☆

NAME: C-View
TELEPHONE: 0702 546373
SYSOP: none

An odd, but intriguing list of facilities. A business section provides a list of manufacturers and suppliers of retail and wholesale goods. There's also — for some reason — a directory of farmers' names and addresses. The latest motoring information and product news is provided with reviews and road tests. This section also explains motor insurance.

A childrens' section includes puzzles, recipes — again an odd choice — nature watch, short stories and a pets corner.

You can also take part in an official Dungeons and Dragons game using either TSR or simple C-View rules. The system also provides a series of Astra Games on of which, an aerial dog fight, involves making choices to go up, down or any-which-way by pressing the appropriate key. It's excellent fun and, to a limited extent, rivals Micronet. And of course, it's free

RATING: ★★★★★

NAME: Hytek
TELEPHONE: 03634 802
SYSOP: Commercial

A teleshopping service for those of you after computer equipment, coupled with a messaging facility and product news.

Trading is by credit card or cash-on-delivery. All prices are competitive and the board is useful even if you just want to see what's new on the computer/electronics market. The board also gives information about computer repairs and servicing and where to rent computers. Postal orders are usually fulfilled within three days

RATING: ★★☆☆☆

NAME: Metrotel
TELEPHONE: (01) 941 4285
SYSOP: Graham Hawker

A London-based system which gives information on local landmarks — for instance, there's a Good Pub Guide (very important). The system also includes a message board, notes of Videotex in London and an adventure game where anyone can play

RATING: ★★★★☆

NAME: Prometheus
TELEPHONE: (01) 300 7177
SYSOP: Barry Spencer

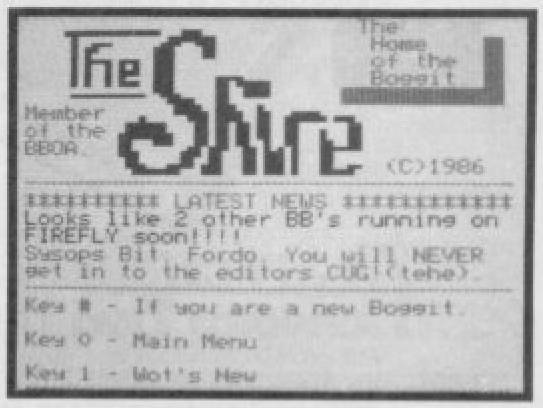
For those interested in astronomy, satellite communications, and stellar mythology. The core of the board contains a simple expert system which will give the latest positions of satellites, stars and planets. The board will also tell you the history of any selected star together with any mythological being to which it is linked. Events and exhibtions are also featured such as what's going on at the Royal Greenwich Observatory and the National Maritime Museum

RATING: ★★★★☆

NAME: On-line
TELEPHONE: 0429 34346
SYSOP: John Hunter

News about computers, product reviews and a bulletin board list. The Clubspot gives info on other boards and special interest groups for people such as adventurers. The titles are mainly utilities but who's quibbling? Finally, if you're artistically inclined you could design a graphics screen and put it up on-line

RATING: ★★★☆☆



NAME: The Shire
TELEPHONE: 07373 63122 (off line on Monday)
SYSOP: Paul Clevett

Calls boarders Boggits and the general atmosphere is one of fun — similar to Gnome at Home. There are technical tips, an on-line helpline and chess game, messages from other boarders and special product offers. Many of the boarders seem to be on first name terms so this is obviously a board on which you can build-up special relationships!

RATING: ★★★★★

Just in case you missed last month's three pager, here's a run-down of the lingo used in our guide

● A bulletin board's name is like the call signal of a CB station. You don't need to do anything technical with it but names such as Gnome at Home and Communitel will gain you instant appreciation amongst other boarders

● A Sysop is a system operator who up-dates the information on the board, provides editorial comment and censors users' replies if necessary. The Sysop is the law

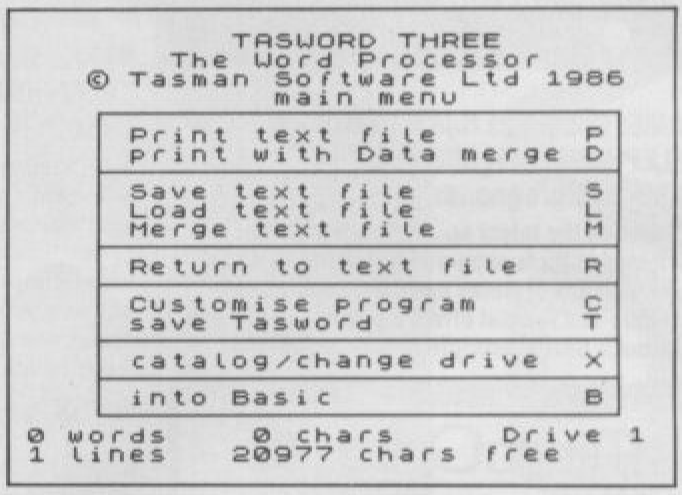
● Each bulletin board has its own character, shaped by the type of information it provides. We haven't given details of all the features on our top ten — that'd spoil your fun — but our quick index should suffice.

● All the bulletin boards mentioned are 1200/75 baud — so you need a modem that can handle this information transfer speed — and all of them are open 24 hours a day.

TASWOR

THE WORD PROCESSOR – A NEW STANDARD FOR THE







TASWORD TWO led the way in setting a standard for word processing on the ZX Spectrum. TASWORD THREE pioneers the new standard.

TASWORD THREE retains all the features which have made Tasword Two a household name for the Spectrum. With many additional features and enhancements, including a built-in mail merge and up to 128 characters per line, TASWORD THREE is the definitive word processor for the Spectrum and Spectrum+ with microdrive.

ZX SPECTRUM

TASWORD TWO

THE WORD PROCESSOR

TASWORD TWO for the ZX 48K Spectrum cassette £13.90 microdrive cartridge £15.40

"Without doubt the best utility I have reviewed for the Spectrum"
HOME COMPUTING WEEKLY APRIL 1984

"If you have been looking for a word processor, then look no further"
CRASH JUNE 1984

With 64 characters per line on the screen and a host of useful features TASWORD TWO is the ideal cassette based word processing package for the Spectrum owner.

TASPRINT

THE STYLE WRITER

TASPRINT for the ZX 48K Spectrum cassette £9.90 microdrive cartridge £11.40

A must for dot matrix printer owners! Print your program output and listings in a choice of five impressive print styles. TASPRINT utilises the graphics capabilities of dot matrix printers to form, with a double pass of the printhead, output in a range of five fonts varying from the futuristic Data-Run to the hand writing simulation of Palace Script. A TASPRINT gives your output originality and style! The TASPRINT fonts are shown to the right together with a list of compatible printers.

TASCOPY

THE SCREEN COPIER

TASCOPY for the ZX Spectrum with Interface 1 cassette £9.90 microdrive cartridge £11.40

The Spectrum TASCOPY is for use with the RS232 output on ZX Interface 1. It produces both monochrome (in a choice of two sizes) and large copies in which the different screen colours are printed as different shades. With TASCOPY you can keep a permanent and impressive record of your screen pictures and diagrams. A list of printers supported by TASCOPY is given to the left.

TAS-DIARY

THE ELECTRONIC DIARY

TAS-DIARY for the ZX 48K Spectrum and microdrives. Cassette £9.90

Keep an electronic day-to-day diary on microdrive! TAS-DIARY includes a clock, calendar, and a separate screen display for every day of the year. Invaluable for reminders, appointments, and for keeping a record of your day. The data for each month is stored as a separate microdrive file so that your data for a year is only constrained by the microdrive capacity. TAS-DIARY will work for this year, next year, and every year up to 2100! Supplied on cassette for automatic transfer to microdrive.

TASMAN PRINTER

INTERFACE

TASPRINT PRINTER INTERFACE for the ZX Spectrum £29.90
RS232 Cable for ZX Interface 1 £14.50

Plug into your Spectrum and drive any printer fitted with the Centronics standard parallel interface. Supplied complete with ribbon cable and driving software. The user changeable interface software makes it easy to send control codes to your printer using the method so successfully pioneered with TASWORD TWO. The cassette contains fast machine code high resolution full width SCREEN COPY SOFTWARE for Epson, Mannesmann Tally, Shinwa, Star, Tandy Colour Graphic (in colour!) printers. TASCOPY shaded screen copy software for this interface (value £9.90) is INCLUDED in this package.

The TASCOPIES and TASPRINTS drive all Epson compatible eight pin dot-matrix printers e.g.

		BROTHER M1009
AMSTRAD DMP2000	NEC PC8023B-N	BROTHER HR5
EPSON FX-80	MANNESMANN TALLY MT-80	SHINWA CP-80
EPSON RX-80	STAR DMP501/515/5610	DATAC PANTHER
EPSON MX-80 TYPE III	COSMOS-80	DATAC PANTHER II

COMPACTA - bold and heavy, good for emphasis
DATA-RUN - A FUTURISTIC SCRIPT
LECTURA LIGHT - clean and pleasing to read
MEDIAN - a serious business-like script
PALACE SCRIPT - a distinctive flowing font

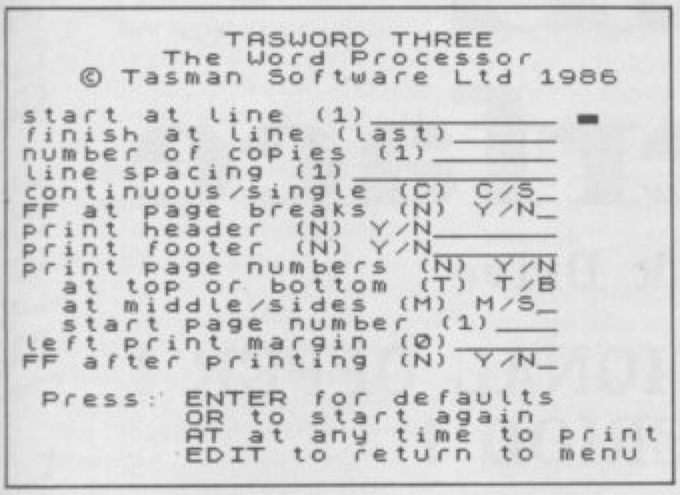
TASPRINT output shown at less than half-size.

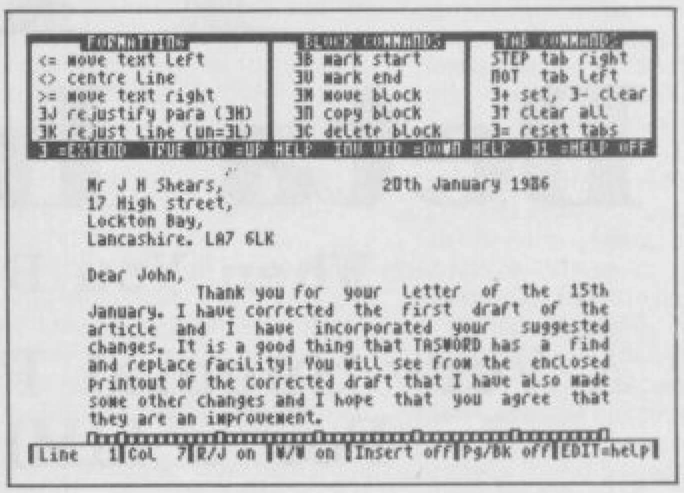
Compatible with Spectrum, Spectrum+, and 128K Spectrum



D THREE

E ZX SPECTRUM AND ZX SPECTRUM+ WITH MICRODRIVE





Please note that TASWORD THREE is only supplied on, and will only run on microdrive (Opus Discovery version now available – see below).

TASWORD THREE — THE WORD PROCESSOR — Microdrive £16.50

One of a famous family: TASWORD TWO (ZX Spectrum), TASWORD MSX (MSX Computers), TASWORD 464 (Amstrad), TASWORD 464-D (Amstrad), TASWORD 6128 (Amstrad), TASWORD EINSTEIN (Tatung Einstein), TASWORD 64 (Commodore 64)

Available from good software stockists and direct from Tasman Software, Springfield House, Hyde Terrace, Leeds LS2 9LN.
Tel: (0532) 438301

TASWIDE
THE SCREEN STRETCHER

TASWIDE for the ZX 48K Spectrum cassette £5.50

With this machine code utility you can write your own Basic programs that will, with normal PRINT statements, print onto the screen in the compact lettering used by TASWORD TWO. With TASWIDE you can double the information shown on the screen!

TASWORD THREE
FOR OPUS DISCOVERY

A special version of TASWORD THREE for the Opus Discovery disc drive. Disc £19.50

ZX SPECTRUM 128
TASWORD 128
THE WORD PROCESSOR

TASWORD 128 for the ZX Spectrum 128 cassette £19.95

TASWORD 128 has been especially developed to use the additional memory of the 128K Spectrum. This gives text files that are over 60K long – this is about ten thousand words! TASWORD 128 has all the features of TASWORD THREE (mail merge only when transferred to microdrive). TASWORD 128 is supplied on, and will run on, cassette. TASWORD 128 is also readily transferred to microdrive by following instructions supplied with the program.

SINCLAIR QL
QL is a trademark of Sinclair Research Ltd

TASCOPY QL
THE SCREEN COPIER

TASCOPY QL for the Sinclair QL microdrive cartridge £12.90

TASCOPY QL adds new commands to QL Superbasic. Execute these commands to print a shaded copy of the screen. Print the entire screen or just a specified window. TASCOPY QL also produces large "poster size" screen copies on more than one sheet of paper which can be cut and joined to make the poster.

TASPRINT QL
THE STYLE WRITER

TASPRINT QL for the Sinclair QL microdrive cartridge £19.95

TASPRINT QL includes a screen editor used to modify files created by other programs, such as QUILL, or by the user from Basic. These modified files include TASPRINT control characters and may be printed, using TASPRINT, in one or more of the unique TASPRINT fonts.

Available from good stockists and direct from:

Tasman SOFTWARE

Springfield House, Hyde Terrace, Leeds LS2 9LN. Tel: (0532) 438301

If you do not want to cut this magazine, simply write out your order and post to: TASMAN SOFTWARE, DEPT SU, SPRINGFIELD HOUSE, HYDE TERRACE, LEEDS LS2 9LN

I enclose a cheque/PO made payable to TASMAN Software Ltd OR charge my ACCESS/VISA number: ....

	ITEM	PRICE
NAME ________	________	£ ________
ADDRESS ________	________	£ ________
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________	Outside Europe add £1.50 per item airmail.	£ ________
Telephone Access/Visa orders: Leeds (0532) 438301		TOTAL £ ________

Please send me a FREE Tasman brochure describing your products for: Spectrum____ QL____ MSX____ Amstrad____ Commodore 64____ Tatung Einstein____ SU

Overseas: The following distributors of Tasman products may be contacted for the address of local suppliers. Many products are supplied in translated form. FRANCE & SWITZERLAND Semaphore Logiciels, CH 1283 La Plaine, Geneva. SCANDINAVIA Kelly data, Postboks 43, Rehtad, Oslo. NETHERLANDS Filosoft, PO Box 1353, 9701 BJ Groningen. GERMANY Profisoft, Sutthauser Str 50/52, D 4500 Osnabruck. BELGIUM Easy Computing, Avenue Guillaume Lefever 30, 1160 Brussels. PORTUGAL Informova, Campo Grande 28 4 A, 1700 Lisbon. AUSTRALIA Dolphin Computers, 99 Reserve Road, Artarmon, New South Wales 2064. NEW ZEALAND Software Supplies, PO Box 865, Christchurch. U.S.A. Ramex International, 17620 26 Mile Road, Washington MI 48094.

NEXOR

ARCADE REVIEW



▲ One chair ● One table ● A lot of bombs ● Any connection?

A desperate last stand against the Andromedans — your fate as you find yourself abandoned on **Nexor**. The role of hero is thrust upon you and you've no choice — Nemisis — a deadly weapon — and its blueprints must be saved.

There's a small catch here though. Nemisis is in 10 bits and you don't know where the pieces are. Likewise, the blueprints must be found and beamed to safety, if only you can find a new control panel for the broken Matter Transfer Beam.

And that's the game. If it sounds easy, it isn't. The graphics are excellent, well up to Design Design's usual high standards — there's no colour clash, probably because each room is one colour and the masking effects are spot on.

The **Nexor** complex is about 13 levels deep with a huge number of rooms and corridors to puzzle your way through. Should you fall down the main lift shaft to Level 13, you won't die but it's a long tortuous journey back to the top. You'll have to use whatever lifts come to hand — be it square blocks or bubbles. These will carry you slowly up and stop at various intermediate levels. You'll then have to scurry across a platform or grid and jump on to something else to take you higher to the level you want.

Some rooms are simply stroll through jobs and are pretty uninteresting — others are infuriatingly difficult and need quite a bit of thought and practice before you can get from one side to another. The most deadly objects to avoid are bombs which tend to lie about all over the place. Bombs and other unnamed whizzing objects will kill on contact, and though eight lives sounds a lot, they soon get used up.

Timing is the most important element of survival.

Each room can be easily negotiated once you've sussed out where and how far you can move.

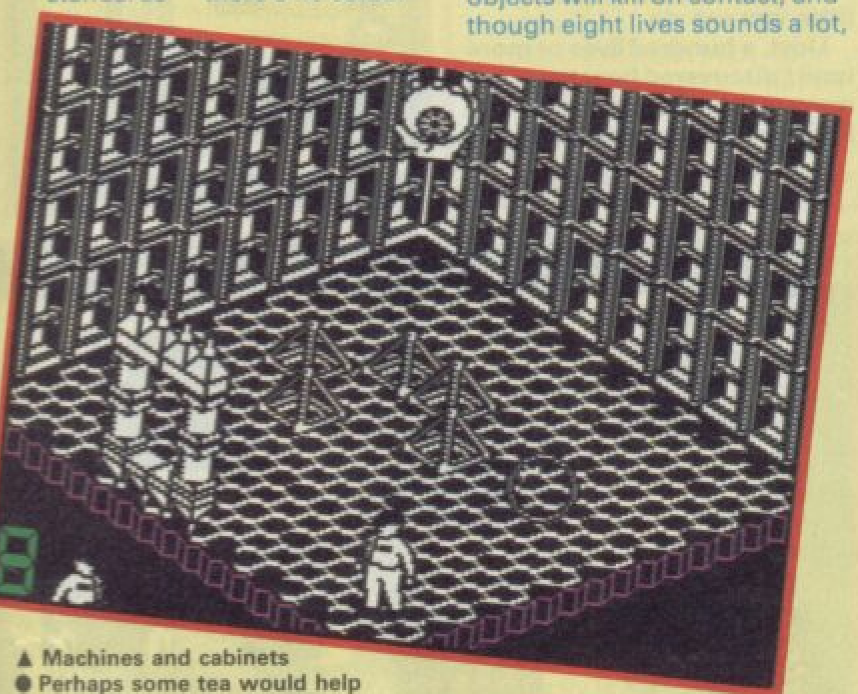
In some rooms you'll find a number of objects which can be picked up though you can only carry one at a time. These consist mainly of chairs and blocks which can be balanced on top of each other to create a staircase. Then, if you're quick, you can hop up and into a high doorway before bad tempered aliens push the boxes away.

Your character is a chunky little fellow with realistic animation, though he plods sluggishly rather than runs, and can't leap very high — hence the boxes. On some occasions jumping is essential is when you find yourself moving on an automated walkway in the wrong direction. Just turn round and, with the direction key and jump button pressed you'll soon make headway against the walkway. It's a bit like running up a down escalator.

Once you've found a bit of Nemisis or a blueprint, a message appears telling you how much time you've got left. Quite useful, though I found my lives ran out long before the alotted time expired.

A certain random element creeps into the game too. In some cases, a room will be inhabited by all sorts of moving nasties, some which meander others seem to have set paths, but the next time you enter you might not find any. Perhaps they've all emigrated to a different area of the labyrinthine underground maze of Nexor. Whatever, a map would be a definite asset.

Though I found several pieces of the Nemisis, I didn't find the blueprints or the spare control panel, though I searched long and hard and managed to find my way round a surprising number of obstacles. However, the blueprints are more important and it's better to beam those away and self destruct Nexor if time is running out ■



▲ Machines and cabinets
● Perhaps some tea would help

HINTS AND TIPS

- **Take care not to touch any moving aliens or walk into bombs**
- **Use chairs and blocks to create a staircase to get over dangerous objects**
- **Bubbles can be used as a means of transport**
- **On moving escalators, to run in the opposite direction, use the jump button**
- **Some moving blocks can be used to carry you round an alien-filled room**

FACTS BOX

Great graphics, with lots to do. Nexor's frustrating puzzles should keep you busy for a good few hours

NEXOR
Label: Design Design
Author: Graham Stafford
Price: £7.95
Joystick: various
Memory: 48K/128K

Reviewer: Clare Edgeley

★★★★★

SOFTWARE STAR RATINGS

All software reviews carry a star rating, the basis of which is value for money programming, graphics, speed, speech and sound presentation and addictiveness

★★★★★
Solid gold. Buy it

★★★★☆
Well worth the folding stuff

★★★☆☆
Pretty average Buy if desperate

★★☆☆☆
Very poor. Probably over-priced too

★☆☆☆☆
A total rip-off. Complain loudly

ARCADE REVIEW — TOOL-KIT REVIEW — WORK-OUT REVIEW — STRATEGY SIMULATION REVIEW — ADVENTURE REVIEW

Each review carries an icon which shows the type of software.

Arcade is for animated games, which in general, reduce the life span of your joysticks.

Toolkit covers programming utilities which improve the quality of home-made software or packages which make machine code easier to write.

Work Out, software which can be used in the home, such as car maintenance or home finance.

Strategy and Simulation are games where thought, planning and judgement are the principle skills required.

Adventure includes either graphic or text adventures.

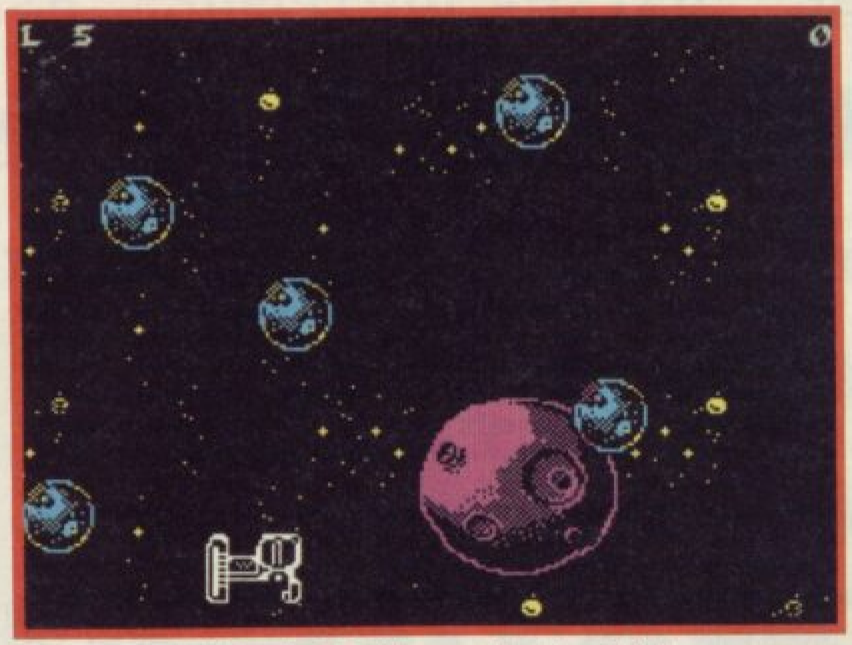
LIGHTFORCE

Lightforce, is, simply, the ultimate shoot 'em up on the Spectrum.

'You obliterate things, you dodge things, you need faster than lightening reflexes. If you survive the first couple of levels you're pretty good.

Hang on a minute though. Isn't there something wrong here. I mean is the age of up-right-left-down-fire games gone or what? What about icons, artificial intelligence, what about complexity?

Lightforce is a simple game presented using every programmer's trick there is, Faster than Light are experienced programmers. In another guise the company was called Gargoyle and created in games like Tir Na Nog some of the most sophisticated and complex adventure puzzles ever.

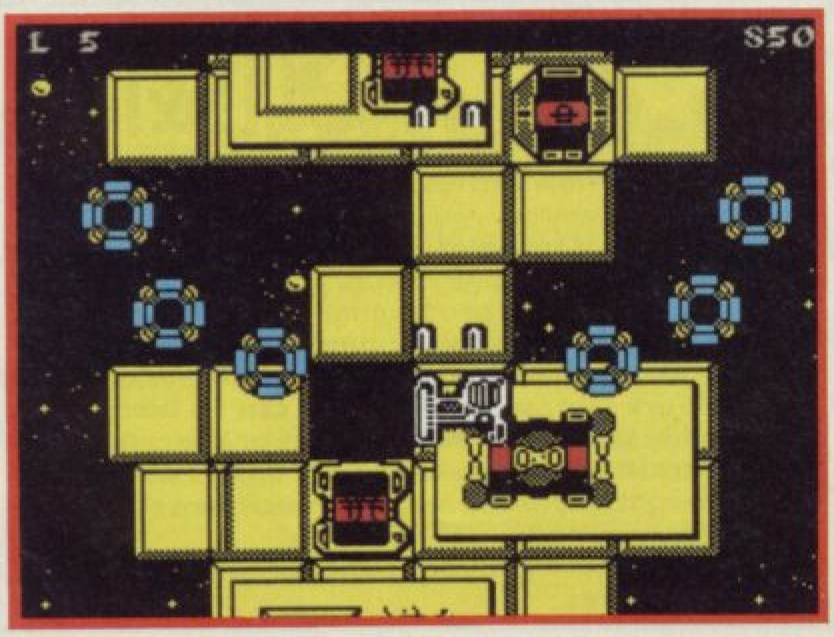


▲ Space, the final frontier ● Battling over the asteroid belt

I think the achievement in Lightforce is simply this — Faster Than Light has created the nearest thing to a true arcade game ever seen on the Spectrum. Somehow it combines highly detailed backgrounds, with large sprites, with colour and manages to scroll the whole lot along very smoothly.

Do you need a plot? For some reason or other you, equipped only with a few battle cruisers, must destroy not only a wide selection of assorted alien spacecraft, but also a host of buildings, and other gear. Some of the aliens lob vicious mines at you. This is bad. There are a variety of backgrounds, each with particular features and problems. The detail and variety of the backgrounds is astonishing. You begin hurtling over a jungle planet but later blast your way across an ice world, an industrial complex and a river.

A space industrial complex ● You know what to do with those little blue devils . . . ● Destroy buildings for bonus points ▼



Getting a high score means not only lasting the course but going for a wide range of bonuses. This usually involves destroying all the buildings of a particular complex. Though the game is simply described, survival is not easy. The alien hoards in Lightforce are a sophisticated bunch not about to fly in conveniently avoided formations. Alien attack patterns are subtle and complex and with each you must learn a whole new set of tactics. As with all the best games at least some of the aliens seem absolutely impossible to avoid and just when you're about to admit defeat you discover a way, something, a dodge, that will get you through.

The first such situation in Lightforce arises when a bunch of star shaped aliens come straight for you — it seems impossible to get past them and you end up pinioned on the back wall — easy pickings with little you can do.

I lost, a hundred lives or more until I discovered how my movement patterns were linked to the star ships and figured out how to avoid them . . .

The jungle planet ● The obliteration begins ▼





Much fuss is being made with Lightforce the fact it has 'no attribute problems'. It's an astonishing thing to see — all those highly detailed multi-coloured backgrounds and large sprites resolutely refusing to change colour. The answer is simple but brilliantly executed — in fact all the colours keep to character squares but pixel shading in black and white disguises the fact extraordinarily well.

There isn't much else to say about Lightforce, no complexities of plot to discuss. All it is is just about the most impressive zap 'em game yet seen on the Spectrum. Does that sound pretty good? ■

FACTS BOX

The ultimate blaster, Lightforce is mindless destruction at its very best. An essential purchase

Label: Faster Than Light
Author: in house
Price: £7.95
Joystick: various
Memory: 48/128K

Reviewer: Graham Taylor

★★★★★

SINCLAIR USER CLASSIC

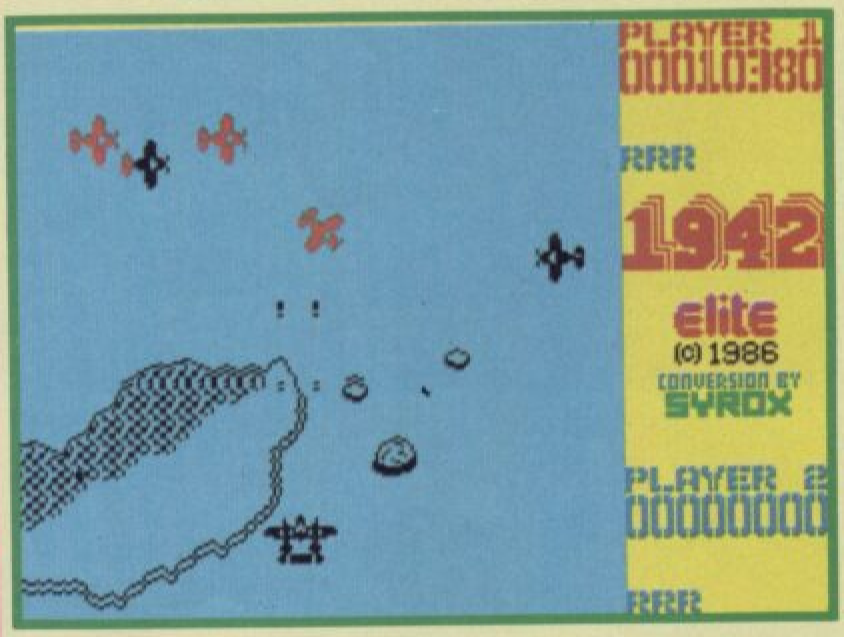
◄ Ships on the runway ● Hang on — not too far to Level 2

HINTS AND TIPS

● Don't stay on the bottom of the screen — you'll get blasted
● Go for all the life bonuses you can — you'll be sure to need them later
● Don't let the Mothership form. Blast the parts before they come together
● Go for survival, rather than a high score



1942



ARCADE REVIEW

◄ Attack! ● Different coloured planes have distinct patterns

It is 1942. War is raging in the Pacific and the enemy — presumably the Japanese, though the program studiously avoids saying so — is building up both its fleet and its air force.

You've been sent on a singlehanded search and destory mission — your objective, to shoot down as many enemy planes as possible.

1942 is the latest hot arcade conversion from Elite — hot on the heals of its **Commando** and **Ghosts 'n' Goblins** No 1 hits.

The basic scenario will be familiar if you've seen the Cliff Robertson film *Battle of Midway*. The game itself is derived from the Japanese (appriately enough) Capcom coin-op firm.

The program keeps pretty much to the style of the Capcom game. It's a top-to-bottom scrolling blast.

You start off on an aircraft carrier. Take off and head out over the ocean and almost at once, the first enemy planes appear.

They come in a variety of shapes and colours. Small red planes fly fairly predictable holding patterns and are easy to shoot down. Small blue planes are less organised and have the annoying habit of shooting back.

Then there's a medium sized blue plane. It's slightly slower and less manoeuvrable than the smaller fighters, but you'll have to hit it a number of times before you succeed in destorying it. When it starts glowing red, you will know 'big blue' is in trouble. Another couple of hits and it will be sure to blow.

And small black planes are definitely nasty. They tend to appear in pairs, appearing on opposite sides of the screen. Some are flown by suicidal pilots who will crash into you if you fail to shoot them down. They're also armed.

Survive long enough and a large, slow black plane appears at the bottom of the screen. Reminiscent of a B52 bomber. It flies slowly straight up the centre of the screen and a rear gunner sprays out bullets in its wake.

The trick to beating it is to manoeuvre your plane behind this great black shark of the skies. Then, you dodge its bullets, while pumping shots into it as fast as possible. If you don't hit it enough times, the enemy planes will reach the top of the screen, where it will weave from side to side, still firing backwards. Then it's a case of who gets who first.

Things are not all negative. From time to time 'POW' capsules floating down the screen which give you extra fuel, fire-power and so on for your plane — if you manage to fly into them. Eventually — if you stay alive long enough — your aircraft carrier will reappear scrolling from the top of the screen. Landing on the carrier hapens automatically when you get within range, it earns you a significant bonus and the chance of a quick respite and ends the first level. Take off again, this time on the second level.

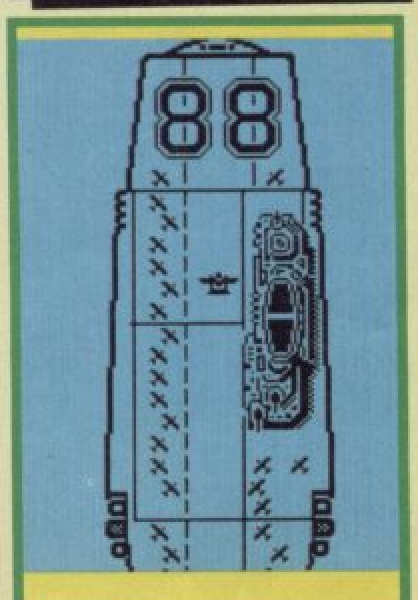
FACTS BOX

A simple idea, simply programmed. But the gameplay is gripping. A taught aerial dog-fight drama for all Red Barons

1942
Label: Elite
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: Brendan Gore

★★★★★



The black bomber invulnerable to attack ● Almost ▼



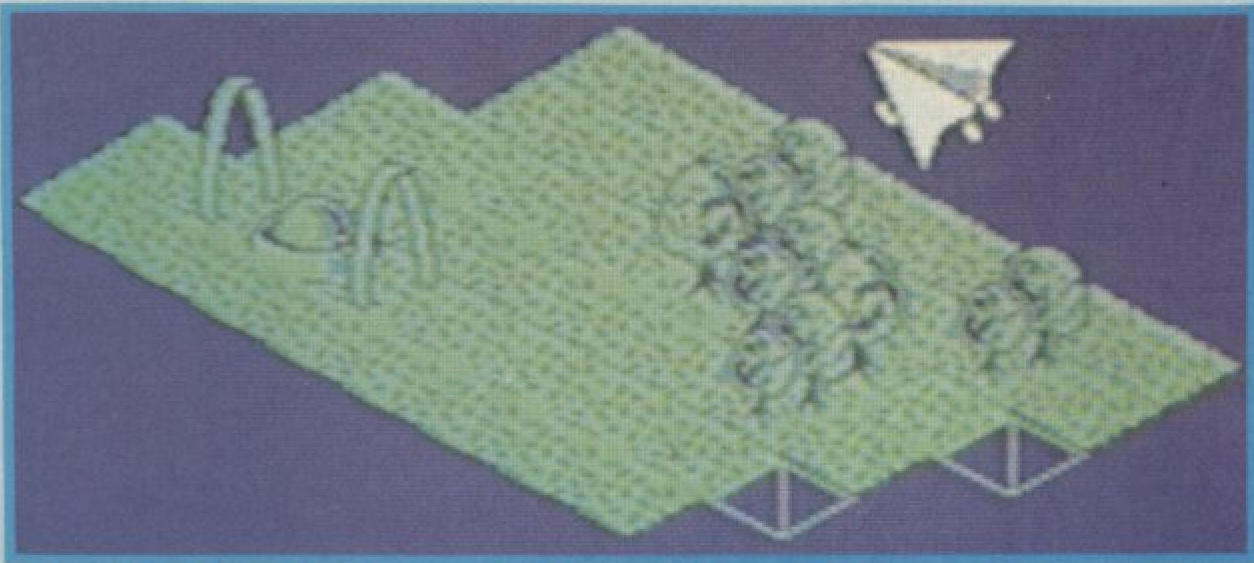
It's possible to play **1942** using the keyboard — just about — but I doubt that anyone without a joystick will survive for long. Complicated aerobatic manoeuvres, such as looping the loop, are controlled from the keybaord.

What's it like as a game? The concept is very simple — its arcade origins are clear from its straightforward scrolling zapping style. The graphics are adequate, but nothing too special. Sound is average.

But shoot 'em up addicts will find themselves glued to the screen.

1942 has the magic ingredient — you'll always be coming back for more. It's good ■

ARCADE REVIEW



▲ Mysterious objects buried in the countryside ● They have unexpected uses

GLIDER RIDER

Glider Rider is an astonishing new game from Quicksilva. Astonishing in look, gameplay, plot and if you have a 128K, sound.

The games uses the **Knight Lore** style of 3D playing area but plays on two levels, literally, since you travel both on bike around the landscape and by hang glider swooping over exactly the same features from above.

This no doubt tricky programming feat has been achieved seemingly effortlessly and **Glider Rider** features a vast futuristic landscape over and through which, you may move.

The game has an interesting plot, or at least some interesting ideas. Your objective is to destroy the headquarters of the Abraxas Corporation — a nasty lot of arms dealers (based on the politics of the real world this game is not.) This involves blowing the plant to bits. The plant is located on BoOs island — a giant artificial construction floating somewhere in the Pacific.

The way to obliterate the plant is to attack and destroy ten nuclear reactors — the power network for the whole place. This involves essentially two operation, seeking them out on a bike and, then having found an available hill, using a hang glider to fly over and drop bombs.

Where does the hang glider come from? Simple. If you find a big enough hill and speed down it on the bike and suddenly reverse direction the bike turns into a hang glider. Nifty eh?

Of course, it isn't as simple as that. Each of the reactors is very well defended by some devastatingly effective laser bases which will sap your energy (if it reaches zero then its goodbye). Then there is the problem of getting more bombs. You start with nine and there are ten bases — clearly some more must be found.

Gradually a technique for playing the game develops, you discover which hills provide safe take-off sites (well, relatively safe take-off sites) and which reactors are the most vulnerable. I found I was within minutes of giving up on the game when I successfully bombed my first reactor using a mixture of luck and judgement.

The graphics are highly detailed and rather imaginative — a mix of green fields with rolling hills and the high tech areas of the central compound. The reactors are scattered around, some partly concealed by trees, sometimes more exposed — nearly always defended you can recognise them easily — they look like huge white bowling balls. If you blast one successfully a little screen opens up and says, emphatically BANG!

No attribute problems — the game is mostely two-colour but that won't bother you too much once you get playing.

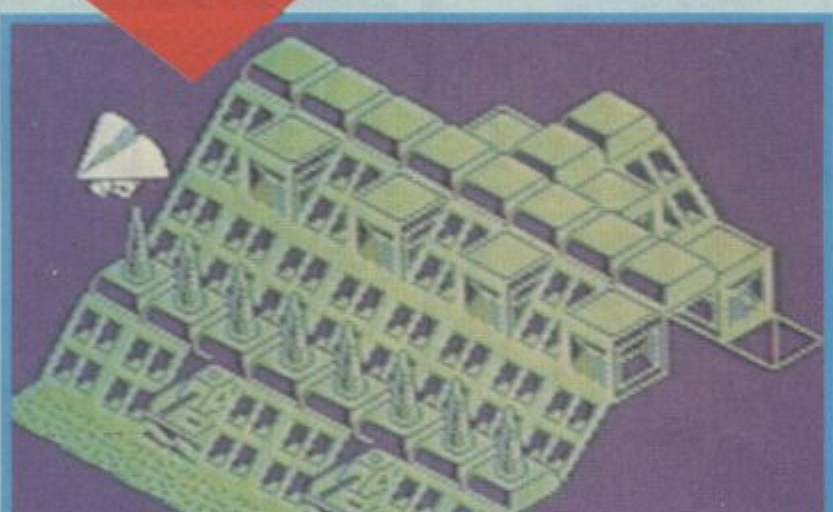
Sound on the 48K version is fairly minimal but adequate. The 128 is another story altogether. The graphics, originality and range of fresh ideas in **Glider Rider** make it a sure winner ■

HINTS AND TIPS

● There is a way of knocking out the laser emplacements — think about it. Where does their power supply flow?
● Work out relative heights carefully. It is easy to crash into things just through not looking
● Examine all the objects on the bike when you are unlikely to be attacked — most things have a purpose
● Don't waste bombs, aim carefully
● Map the island carefully
● Watch your energy level — it can get very low very quickly

SINCLAIR USER CLASSIC

Some parts of the island are heavily defended. ● Note the hidden tanks ● Don't lose too much height or you'll switch back into the bike ▼



FACTS BOX

Very neat and original game featuring two levels of action. Astounding sound on the 128 tips it into classic status

★★★★★

GLIDER RIDER
Label: Quicksilva
Author: Glen White
Price: £8.95
Memory: 48/128K (128K enhanced)
Reviewer: Graham Taylor

Travelling by bike ● A reactor is just visible at the top ● No hills to climb, though ▼



GLIDER RIDER 128

Worth a few comments all on its own. The game is the same except that is has easily the best sound ever heard on a Spectrum. Let's be honest, whilst Spectrum games are often the most original and inventive sometimes most of us envy just a little the three-channel funk music possible on the Commodore. Envy no more, the continuous soundtrack on** Glider Rider **is as funky and exciting as anything you've heard — hardened Sinclair users in the office rose as one from their seats to stare at the TV — surely it couldn't be! Not only a get-on-down soundtrack but digitised effects as well, including a remarkable ring-modulated bell sound at the end of the game

WIN A+2 COMPETITION



SPECTRUM 128K+2

It's here at last — the great new Spectrum 128K+2, certainly the best version of the Spectrum there has ever been.

The +2 is due in the shops around the end of September and will retail for £149, but you can get one for nothing! This month we are running a special competition to win the new machine. And since the machine represents a new era for Sinclair technology we decided to find out how much you know about the good old days of rampack wobble.

Only one prize — don't stand a chance? Well take heart for those who get the questions right but aren't first out of the hat (big grey sack actually) we have a fantastic bonus — 25 exclusive Sinclair User T Shirts. These T Shirts are so totally wonderful that we wonder if anyone will want the machine instead, so we've put a box in for you to tick.

Answer the following questions, all are related to the history of Sinclair and can be answered with a careful bit of nosing around in the right places — like back issues of *Sinclair User*. Write your answers on the form below and send it to: Sinclair +2 Competition, Sinclair User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Closing date for the competition is October 24th.

---

1) What electronics magazine did Sir Clive edit?
2) What colour was the digital watch produced by Sinclair?
3) The Spectrum was partly designed by Richard Altwasser — what was the name of the ill-fated machine he subsequently developed?
4) What software house wrote the QL suite of business software supplied with the QL.
5) What noted newspaper entrepreneur didn't, in the event, save Sinclair Research?

Name ....
Address ....
....
....

Answers

1) ....
2) ....
3) ....
4) ....
5) ....

If I am overall winner I would like

A *Sinclair User* T Shirt ☐

A brand new Spectrum 128K+2 ☐

(tick one box)

T Shirt size S ☐ M ☐ L ☐ XL ☐

*Employees of EMAP may not enter — they can get the T Shirts for nothing anyway!

SUZUKI

48/128K SPECTRUM

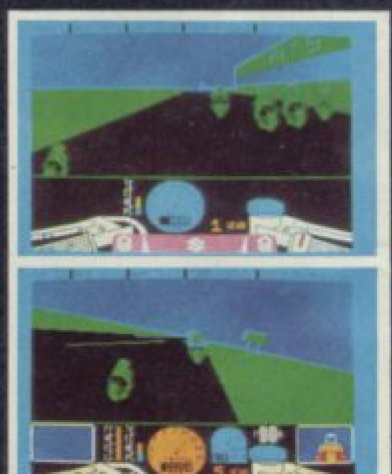
TT RACER



BY R.J. SWIFT

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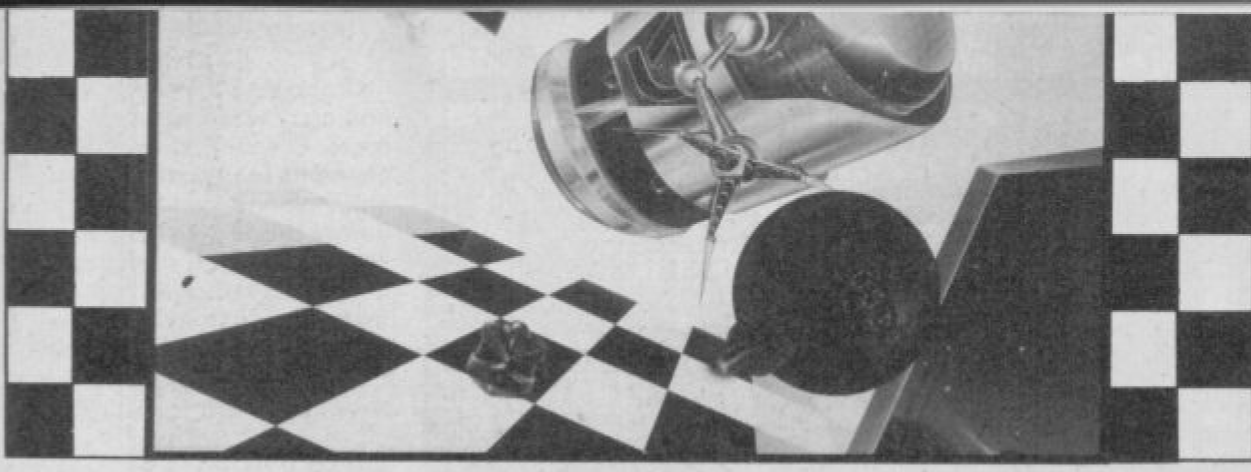
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ARCADE REVIEW

DEACTIVATORS

Deactivators is a game that doesn't really lend itself to comparison with any other program.

I suppose you could call it an arcade strategy game. Actually it is just itself. A curious phenomenon seldom met in the 'lets do **Frogger** again' software industry.

Not merely original, however, **Deactivators** is also very entertaining and tests parts of your brain you didn't even know you had.

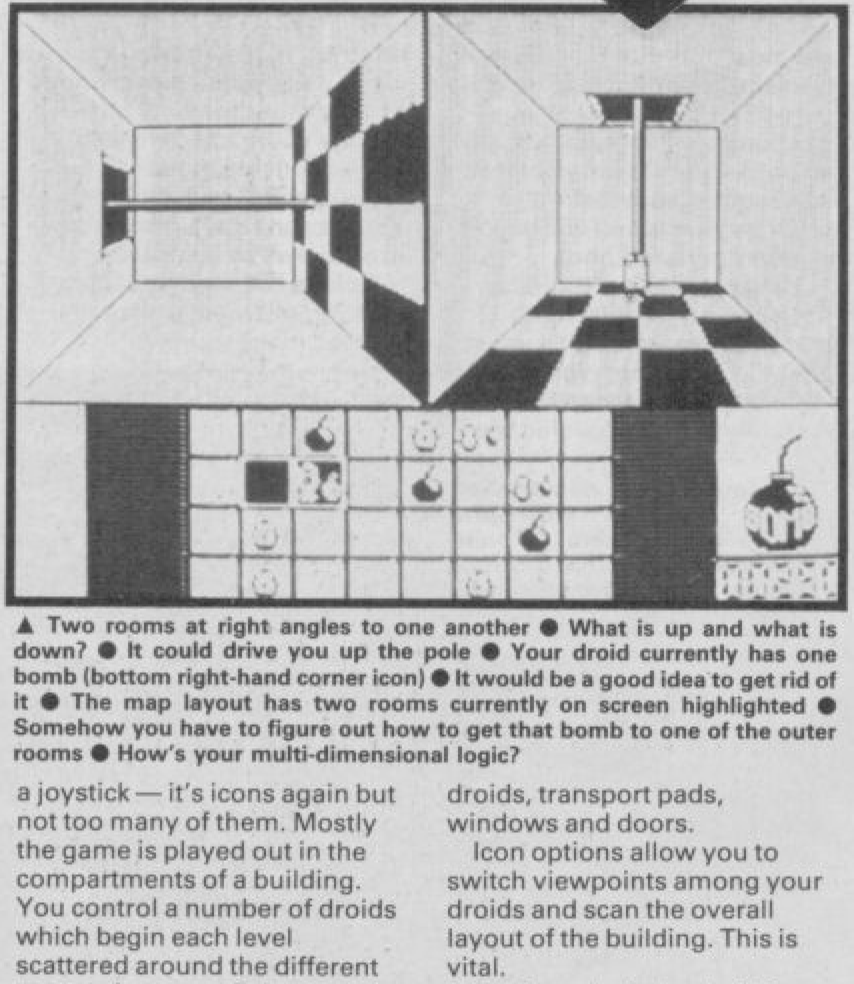
What is it? Well this is the difficult bit. Nominally it's all about saving a building by chucking bombs out of available windows before they explode. Imagine however that the house was designed by a madman and features abstract rooms with windows and doors in all the wrong places. Imagine also that to empty a building of bombs you will have to think in at least three dimensions, develop lightening reflexes and master trajectories. Imagine that the screen is divided into two sections depicting adjacent rooms in which bombs, guard droids, bits of circuit boards and your own team of droids are located. And, finally, imagine you have a time limit and that the game gets harder and harder as you reach each new building level with more and more bombs to be discovered and, most bizarre of all, changing gravities which make it very difficult to judge exactly what effect your bomb throws will have. It takes a lot of getting used to.

That's **Deactivators.** It's a very, very strange game and I love it.

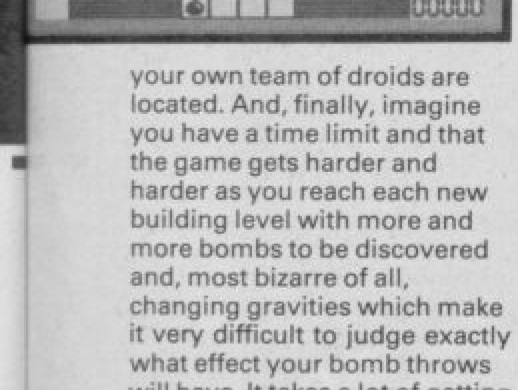
If there has to be a point of comparison I suppose **Spy vs Spy** is the closest I can think of. Although this is not a two-player game, the way you have to keep your eye on several things at once and keep you wits about you is a bit similar.

All commands are issued via a joystick — it's icons again but not too many of them. Mostly the game is played out in the compartments of a building. You control a number of droids which begin each level scattered around the different rooms. As you switch control between droids the central screen will show both the room where that droid is currently situated and the room immediately adjacent to it. Any objects (either bombs or pieces of computer circuit board) are shown, as are enemy droids, transport pads, windows and doors.

SINCLAIR USER CLASSIC



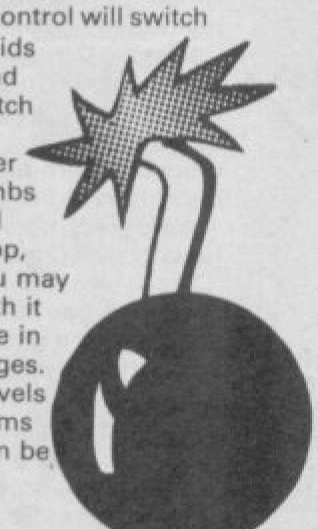
▲ **Two rooms at right angles to one another ● What is up and what is down? ● It could drive you up the pole ● Your droid currently has one bomb (bottom right-hand corner icon) ● It would be a good idea to get rid of it ● The map layout has two rooms currently on screen highlighted ● Somehow you have to figure out how to get that bomb to one of the outer rooms ● How's your multi-dimensional logic?**



Icon options allow you to switch viewpoints among your droids and scan the overall layout of the building. This is vital.

Having selected a droid it may be moved around between any rooms which are connected by a door or by a transport pad. The first task is to find a piece of computer circuit board and place it in a computer. This opens a window or door between rooms without which it will be impossible to complete the level.

The strategy element of the game is really sneaky. It's simply this: you may find that no one robot droid can both collect a bomb and reach one of the building's outside windows. What this means is that you must find a droid that can reach an outside window and a droid that can reach a bomb and then arrange for these droids to meet — except that they can't. What you must do next is get them in rooms adjacent to each other and throw the bomb between them through a window or door. Droid control will switch between droids in mid-air and you must catch the bomb with the other droid — bombs are not good things to drop, although you may get away with it once or twice in the early stages.



On later levels adjacent rooms may not even be on the same horizontal ie the floor of one may be a right angle to the floor of the other — this means figuring out what is going on and turning the joystick accordingly — working out the correct way is very difficult.

Graphics don't need to be astounding but are not bad at all and the there are some nifty sound effects here and there as well as some clever music in the opening stages.

Deactivators is absolutely superb ■

HINTS AND TIPS

- ● Scan first, you must plan your routes carefully
- ● Test gravity effects by tossing something harmless like the circuit board
- ● Respond quickly: just switching control to a droid may be enough to activate a guard droid
- ● You can out-run guard droids and they can be destroyed by making them fall through hatches
- ● Use *Pause* to give yourself time to think

FACTS BOX

Utterly strange, completley original, totally addictive. A number one if there is any justice in the world

★	Label: Ariolasoft
★	Author: Reaktor
★	Price: £9.95
★	Joystick: various
★	Memory: 48/128K
★	Reviewer: Graham Taylor

STRATEGY SIMULATION REVIEW



MISSION OMEGA

The mindgames titles from Argus have often resulted in journalistic U-turns.

Alien, for example was largely dismissed, until a couple of months later. As people began to play it the game slowly grew in status.

So, perhaps it will be the same now with **Mission Omega**, which at first look seems relatively unexciting.

Mission Omega is a maze puzzles game on a grand scale except that strategy and advance planning count for more than turn-on-a-sixpence instant reactions.

As for plot, here's what Argus have to say: Codenamed 'Omega', it simply came out of space. No-one knew anything about it, but it threatened the civilisation of mankind!

Ignore all that stuff, here's the simplified version: baddie thing that looks like a giant maze; you have to use robots to search it because it's radioactive and try to shut down the reactor which will blow up within the hour.

In Stage 1 you design a robot and throughout the game you must design additional robots and send them into the field. Robot design means careful consideration of what features are most important: firepower is useful but drains energy and may be heavy, different legs can support different loads and so on. As you play the game it so becomes apparent that at different points you will need different sorts of robot.

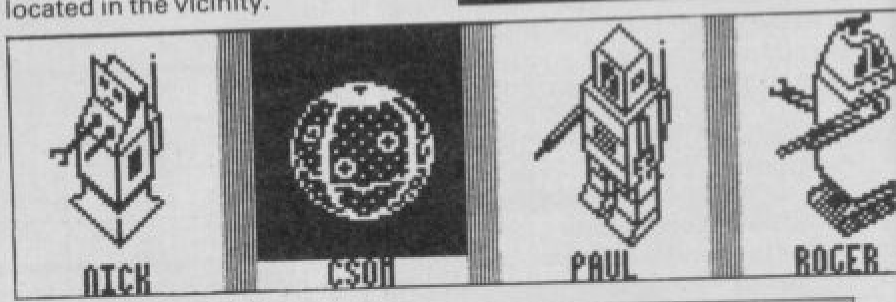
Most of the maze is hidden from you until you actually trace your way though it using one of your robots. You can see what areas of the map have currently been uncovered by referring to a map where known areas and the current positions of your robots are indicated.

Parts of the maze may be 'jumped' using matter transporters (well, flashing squares anyway), other parts are blocked by laser screens which can be switched off by blasting at switches (usually) located in the vicinity.

Organising the robots and finding the routes through the maze. These are the prime elements to the game. If you enjoy planning and strategy games this is unusual and challenging. You even get to blast a few things as well. instrument panels. Sound is equally minimalist. Don't buy the game if these factors matter to you. ■

Graphics

Visually the game is nothing too special, the icons are reasonably interesting, the maze absolutely plain, empty apart from occasional flickering



The four ready constructed robots supplied with the games • Use them or build your own • Each of the four has its own strengths and weaknesses ▶

FACTS BOX

Another enigmatic offering from Mindgames. Definitely for strategists but patience is rewarded

MISSON OMEGA
Label: Mindgames
Price: £9.95
Joysticks: various
Memory: 48/128K

Reviewer: Graham Taylor

★★★★☆

VIRGIN CHALLENGER

Inevitable really. Virgin games has released a computer program based on their heroic gnome-like boss's brave crossing of the Atlantic — alone but for a highly trained boat crew and unhelped apart from by computers, helicopters, a purpose-built ship and unnoticed except by the world's TV crews and a man on board from *Tomorrows World*.

Virgin Atlantic Challenger broke barriers of self promotion never previously breached.

Now its a game. A perfect budget title in fact. Snag is it costs £7.95.

It isn't what you'd think. The obvious thing would be some sort of scrolling graphics drive-the-boat affair. Instead **Virgin Challenger** is more of a management game, based around joystick and icons where you must make the right response to a series of problems.

There are three screens depicting two sections of the boat hull and the cockpit.

Tasks, all accomplished via simple joystick controls, include the following: steering to avoid hazards, steering to meet up with a refuelling tanker, eating to restore energy, controlling engine speed while keeping its temperature down, dealing with telexes and using the radar to check your course.

Strangely, it is vaguely amusing watching the little Richard Branson sprite, complete with funny hair and beard trot around the ship and the whole ship management thing *is* quite entertaining for a while — but I really don't think there is enough to this game to justify its full price tag ■



FACTS BOX

A simple management style game. Entertaining enough to begin with but not likely to last. Should have been a budget title

Label: Virgin Games
Author: Millside Software
Price: £7.95
Joystick: Kempston
Memory:48/128K

Reviewer: Graham Taylor

★★☆☆☆

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First we brought you Swords & Sorcery – we called it the ultimate in graphic adventures and everyone agreed with us. CRASH awarded it Game Concept of the Year 1985 and called it "an outstanding addition to the games playing world". COMPUTER & VIDEO GAMES gave it Game of the Month and described it as "the ultimate computer simulation". Well now we've gone one better – Swords & Sorcery II ***Heroquest*** takes you on a mystical journey never imagined possible within the confines of a home computer.

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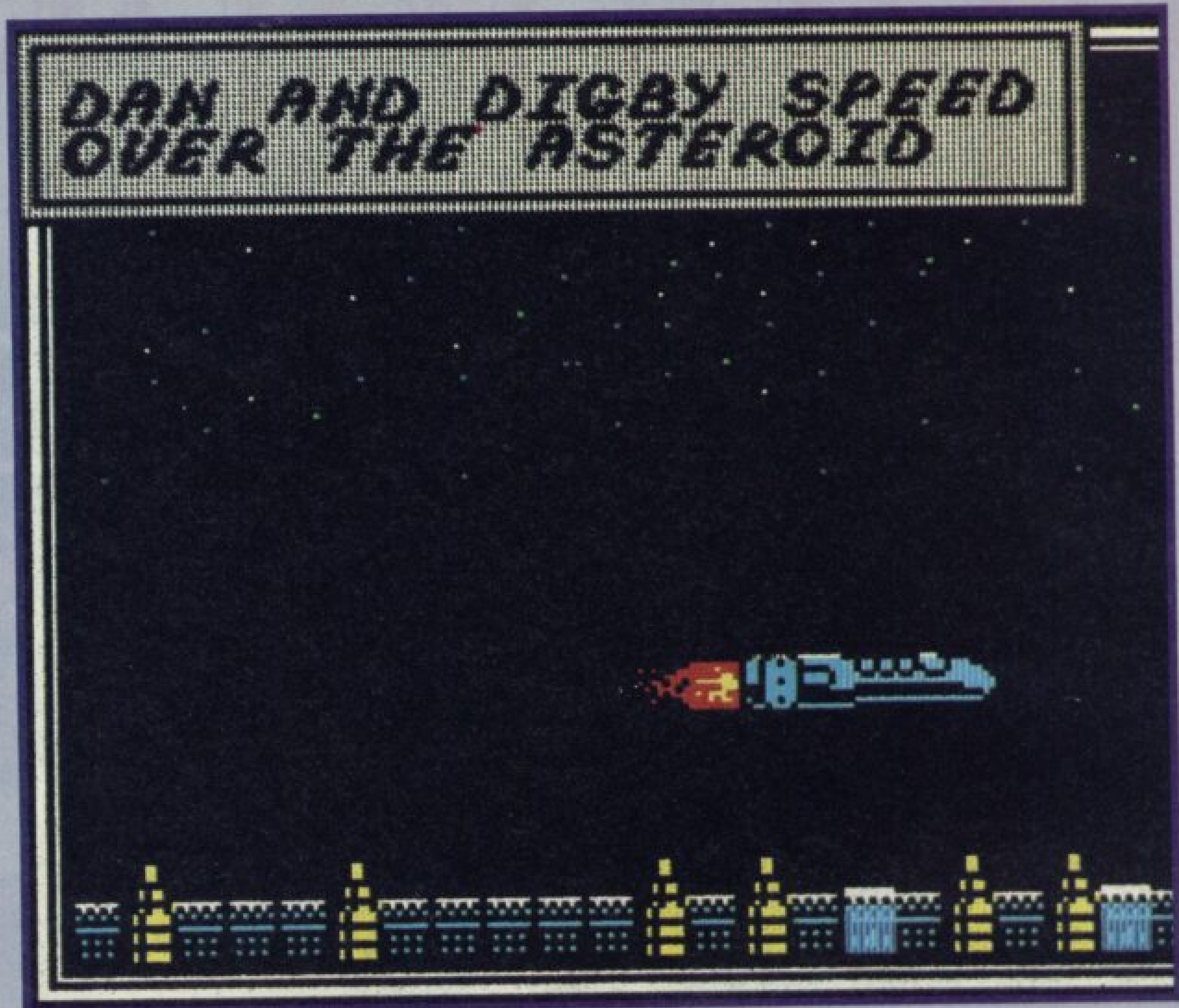
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DAN DARE



Cripes! Dare must save the world yet again ● Will his stiff upper lip be enough?

Dan Dare, comic super-hero from the Eagle is about to make an assault on The Mekon's latest death trap, only this time he's not alone. You're the mug with him.

With only two hours before a hollowed-out asteroid collides with Earth (just like that awful movie *Meteor* with Sean Connery and Karl Malden), Dan Dare leaps into his trusty space craft and zooms into space.

The first sequence in the game is in fabulous comic books style, showing Dan and Digby (first mate) hurtling across the surface of the asteroid with a cartoon-style bubble caption setting the scene.

The whole game turns out to be very cleverly arranged to look like a comic strip with lots of action interspersed with instructions from the computer and insults from The Mekon (a brilliantly drawn murky green creature of indeterminate origin).

Dan Dare is actually no more than a blast the baddies, pick up helpful objects and search around for five detonators which, when assembled in the control room, will blow the asteroid to smithereens. Much the same sort of stuff that's appeared in dozens of games before.

What lifts **Dan Dare** head and shoulders above the others is the obvious care and effort that's gone into every aspect of the program. The graphics, movement and the innovative comic strip look are all terrific. You start off on the surface on the planet but swiftly drop down to a maze of rooms, corridors and lifts patrolled by dozens of Treens, the Mekon's hench-aliens. They're not too happy to see you and if you get shot you are likely to lose energy or get shoved in the nick. It's easy to break out of prison but ten precious minutes are lost each time you end up behind bars and you also have to go back to the beginning of that level and start all over.

Lifts with arrows indicating their direction carry you up and down and doorways take you through to new areas. Later levels take you through to a weird hotch potch of levels interesected by lifts, corridors and yawning gaps to jump.

It seems a cinch at first. When you've taken the destruct mechanism to the control room, a door to the next level opens out there somewhere in the maze. It's easy to find and you'll notice that most of the Treens have disappeared to lurk on the next level. Getting back with the second destruct mechanism is harder as you have to remember the route and run the guantlet of irate Treens at the same time. A map is beginning to be essential. Finding the entrance to the third level's not at all so easy. It's well hidden, and the route through the level is by now very tortuous.

All the while those 120 minutes are ticking way and you can't afford to run out of laser bolts or energy. Whenever you come across bullets or domes, jump on them and ammunition or energy will be increased. If your bullets run out, your best hope is to either find some more or get killed and go to jail. You're not totally powerless though, you can duck and dodge the Treens' firepower to a certain degree.

If you let go of the joystick in mid-run, Dan'll stand up straight and look pointedly at his watch as if to say 'Time's running out. What the heck's going on?'

The Mekon's appearances in the TV screen at the bottom of the screen get more frantic each time you pick up another section of the destruct mechanism. His message take on a desperate edge. 'No! Put that down', 'You will not succeed, Dare' or, 'The earth will be mine'. As he makes each appearance, the TV screen splutters to life with lots of wiggly lines. A bit like something out of *Star Trek*.

From a very basic up, down, left, right, fire combination Virgin has produced a stunning little game. It might not be tortuously difficult but it's fun, innovative and beautifully programmed.

Most important **Dan Dare** is instantly playable. I haven't enjoyed a game so much for ages ■

SINCLAIR USER CLASSIC



▲ Dare makes a break from jail ● Time is running out for Dan . . . but he's not desperate

Hints and tips

● To use a lift, stand in the lift's shadow to the left. The arrows indicate its direction
● Domes and bullets represent extra energy and ammunition. Just leap onto these objects to pick them up
● Automatic laser emplacements set in the floor can be silenced and crushed if you jump on them
● Map the rooms and corridors as you travel through the levels to enable you to return quickly to the control room with the five pieces of the self destruct mechanism
● Make a note of doors which won't open. Those lead to different levels and are opened automatically when you return to the control room with the self-destruct mechanism
● Conserve your ammo. Fire in very short bursts. If you run out, either find some more or get killed. You'll lose ten minutes of time but when you break out of jail your laser will be recharged
● Dodge the laser fire from the ceiling whenever possible — it drains energy

FACTS BOX

Keeps the spirt of the original Eagle comic strip very cleverly, immediately playable and brilliantly programmed

DAN DARE
Label: Virgin
Authors: Gang of Five
Price: £9.95
Joystick: Kempston, cursor

Reviewer: Clare Edgeley

★★★★★



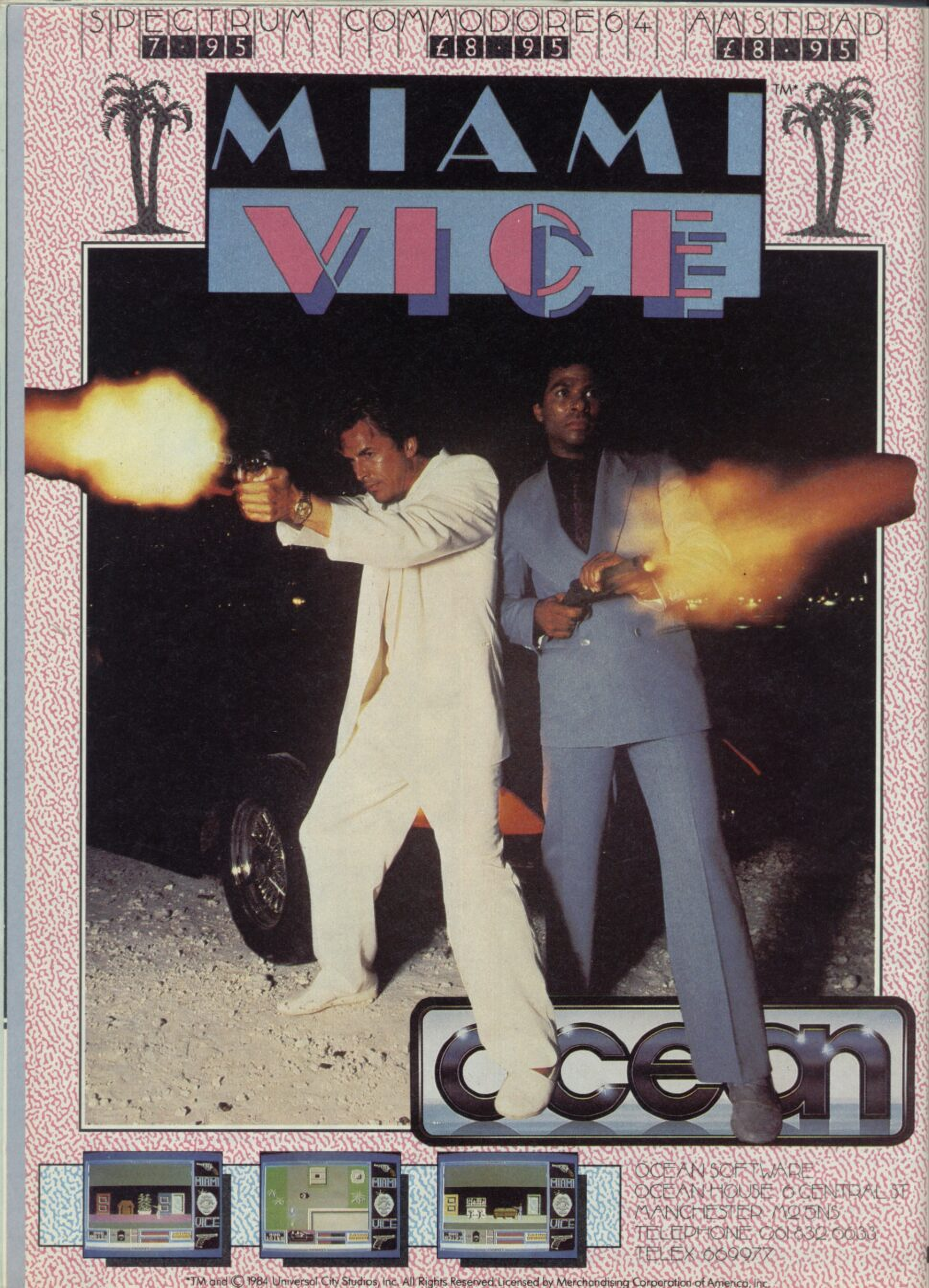
◀ A frantic leap across a yawning chasm takes Dan to the second section

▼ The key opens a door to the next section ● Note the authentic comic strip text



▼ The Mekon threatens, but Dare jumps off the lift, gun cocked ready for action




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HARRIER

STRATEGY SIMULATION REVIEW



SINCLAIR USER CLASSIC

For some people blasting is not enough. Many of us when confronted with a flying program ask only for an up-down-left-right-fire straightforward leave-your-brain-at-the-door-to-the-hanger approach. **Strike Force Harrier** is not like that. **Harrier** is very, very complicated. To use every feature of the game could involve 30 different key presses.

The manual runs to 28 pages, daunting stuff. Conscious of this, Mirrorsoft has provided some 'idiot's first go' detailed instructions which tell you button by button what to press when — without it you'd be getting a review of how the runway looks.

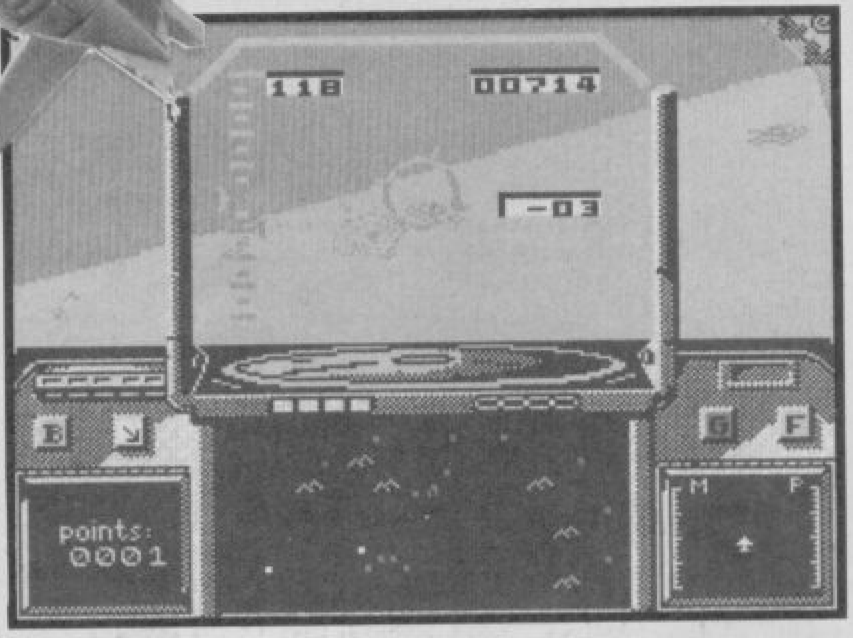
In the event I managed to land, take off and, best of all, blast several enemy jet fighters clean from the skies within about an hour of play. That, despite the fact that **Harrier** is one of the most complex simulations I've ever seen.

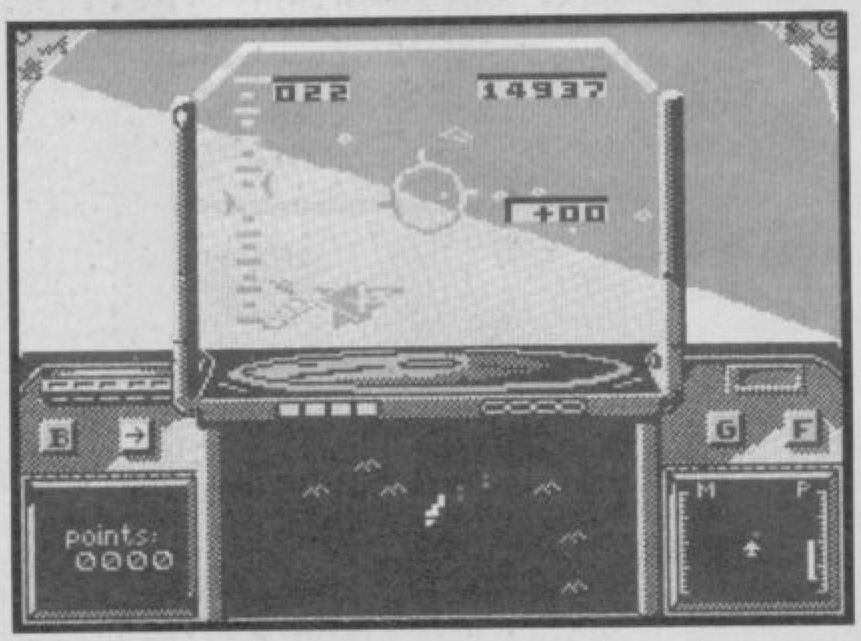
Graphically the game is very impressive — from the interior cockpit display to the 3D scrolling view in the cockpit window. Various programs use various different techniques to achieve the effect of movement past the world outside. **Harrier** uses the 'sprites growing bigger by frames' technique and it works rather well. Nothing looks all that good if you examine it in detail but the overall effect, especially in the midst of battle, is most impressive.

As I have said there are an astonishing range of options in **Harrier.** Although it is possible to get going with around six controls and blast a few things, as you explore the game you'll discover whole new areas of flying possibilities and you'll begin to realise just how vigourous has been Mirrorsoft's drive for authenticity.

For example, there are three ways of taking off — conventionally, STOL where you have only a short runway and, of course, straight up (VTOL). For each mode there are different flying techniques, each set out clearly in the manual and each requiring a lot to learn. The same is that of landing — except there is a fourth method, crashing!

The different techniques all involve a concept new to flight simulations called vector thrust. This is the facility unique to VTOL aircraft whereby the jetstream can be directed via nozzles. There are many additional ways you may find of using this feature to give, for example, height with deacceleration. Sometimes a vital technique in combat.





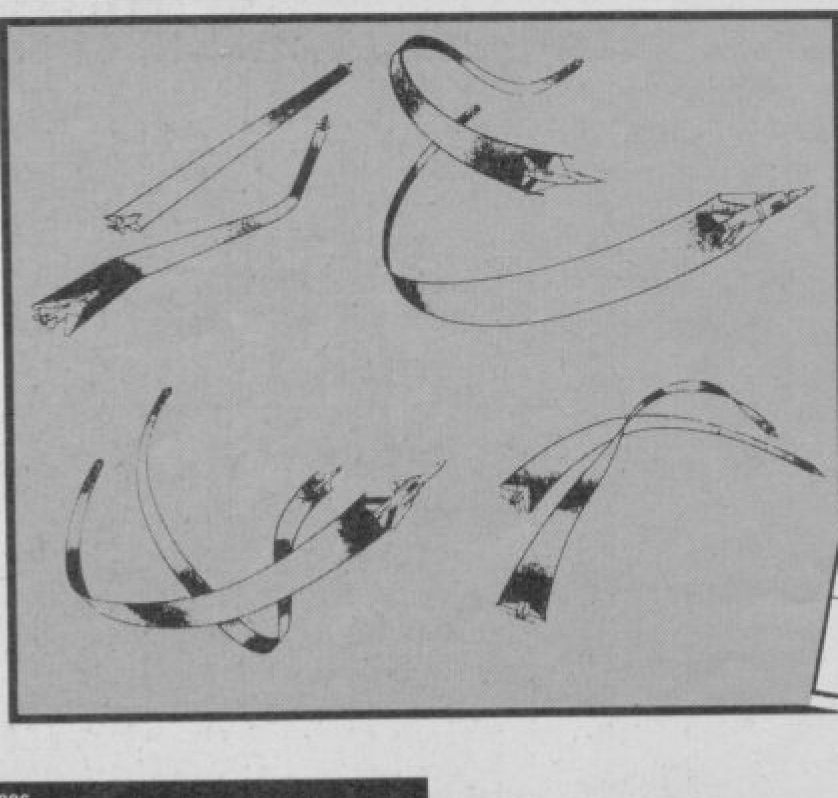
There is a specific task in the game which will involve use of nearly all the features. You must destroy an enemy HQ, first destroying enemy tanks and setting up a new operational base. First select an appropriate area then land perfectly. Then move one of your old bases forward — it ain't easy.

Attack and defence is not merely a matter of firing and getting out of the way. There are a vast number of specialised and specific techniques to be learnt. The manual has pages of flight pattern information indicating how to avoid specific forms of attack and instead achieve attack positions yourself.

Before you really get to grips with **Harrier** you will need to become throughly conversant with all the controls. You also need to learn to read the FOFTRAC tracking system.

Harrier rewards effort, the graphics and sound are good but it's the sophistication and accuracy of the simulation that is the whole point.

If that's the kind of challenge that appeals you'll love **Strike Force Harrier** ■



FACTS BOX

Good graphics and a wide variety of features. One of the most sophisticated flight simulations ever

★★★★★

Label: Mirrorsoft
Author: Rod Hyde
Price: £9.95
Memory: 48/128K
Joystick: various
Reviewer: Graham Taylor

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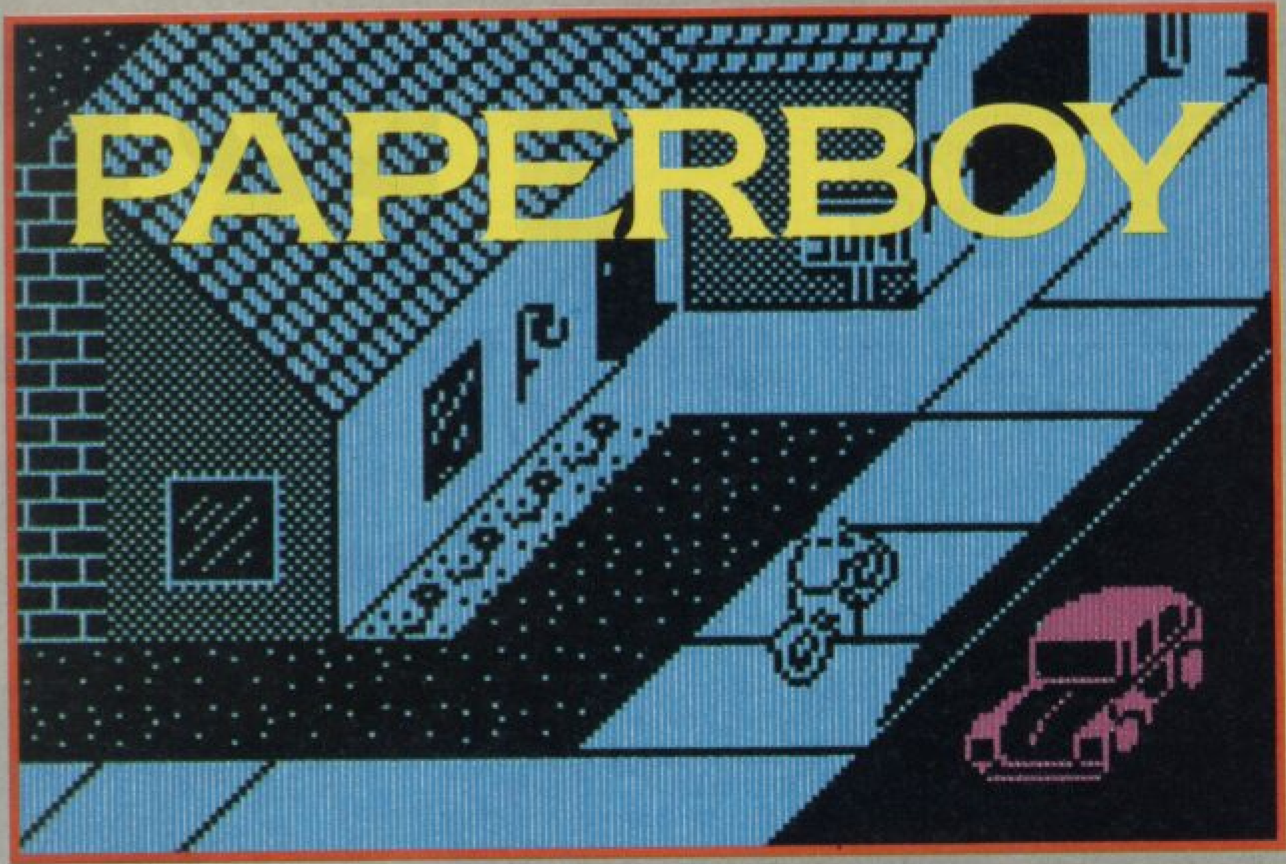
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PAPERBOY

ARCADE ★ REVIEW

A suburban street ● Coming up a house needing a paper ● Watch out for traffic!

Paperboy was one of *the* licensing deals, the game was and is, a cult hit in the arcades and the first home computer versions were eagerly awaited. Now this tribute to teenage free enterprise in mid-America has arrived on the Spectrum from Elite and guess what? It's not bad at all.

When you come to think about it, there really isn't anything very special about the gameplay in **Paperboy**. The game idea is nifty enough, but in the end you aim copies of the paper (which appears to be called the Sun) at letterboxes and swerve your bicycle left and right to avoid obstacles, it could as easily be laser beams, enemy spaceships and battle cruisers. What made the arcade game so special was the quality of the graphics and the great soundtrack, well, loud soundtrack anyway. I had my doubts about how the special qualities of the original would translate to the Spectrum but actually I think Elite has produced its best conversion yet.

The plot of the arcade game has been retained in its entirety — the street designs seem to be almost the same. The idea is to steer your bike along the twisting pavement in front of a row of timber style houses (where the everyday folks live in the American midwest). You have essentially two delivery objectives — get the paper into the letter box of those people who have ordered it (as indicated by a signpost in front of their house), and use the papers as projectiles to smash the windows of those who haven't yet decided to subscribe. I have been asked to stressed at this point that EMAP Central Control was never engaged in such practices to sell any computer magazines or other publications, and anyway we were all somewhere else at the time.

The game could so easily have been one of those flickery sprite jobs, where the garishness of the constantly changing colours is only excelled by the jerkiness of the scrolling. However, the programming on **Paperboy** is way beyond that — the scrolling of the street is very smooth indeed and as for colour clash well, the whole this is in two colours.

The graphics are nicely detailed, if blue. I particularly liked the bonus assault course at the end of the run and the go-cart which drives across your path.

Winning in the game is a matter of combining precision paper throwing with avoidance of casual bystanders, cars, giant tyres — the usual stuff. As a Spectrum conversion, the game inevitably lacks some of what made the original great (like sound) nevertheless I don't think those who buy this on the strength of the original will feel cheated — it's as good a conversion as could reasonably be expected ■

FACTS BOX

Excellent conversion. Inevitable hardware restrictions make the game less 'special' but good fun

★★★★★

PAPERBOY
Label: Elilte
Price: £7.95
Joystick: various
Memory: 48/128K
Reviewer: Graham Taylor





A full bag of papers ● The end of the first street ▼



Watch out for the go kart ● Smash windows of non-subscribers ▼

TRIV PUR

History

Q What is **Trivial Pursuit**?

A It's a very expensive board game for the upwardly mobile and one of the hottest licencing deals ever. Domark has the deal and has produced the computer version of the game.

Q Ordinarily would this auger well for the product?

A Possibly not. Domark has produced more than its fair share of dodos. Absolute dodos, in fact.

Q What might one have expected?

A Silly bleeps, poor visual representations of the counters and the board, things changing colour due to attribute problems, limited choice of questions, little imagination.

Q But?

A Domark has done an absolutely wonderful job. This conversion is superb.

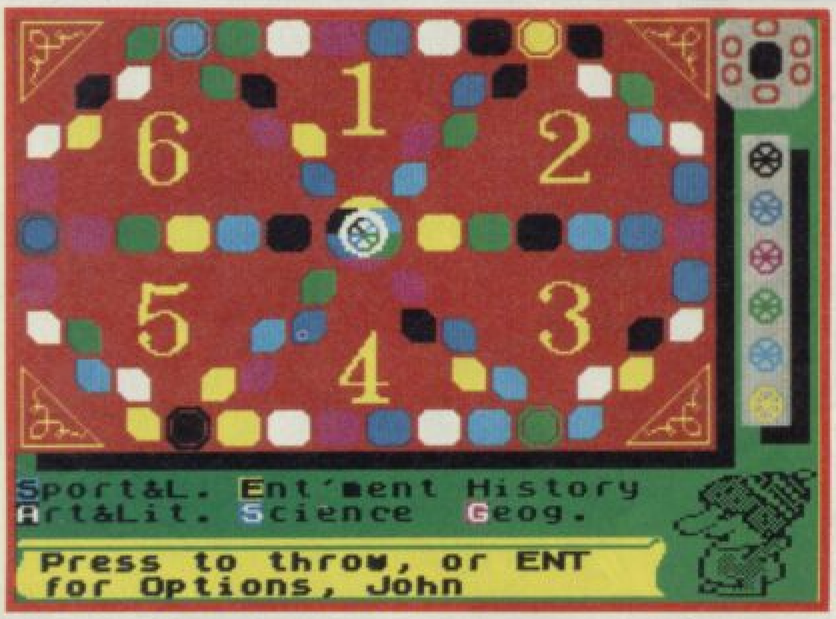
When board games get converted to the computer the odds of the end result being something worth playing are pretty small. Off-hand only **Scrabble** has really stood out by managing to exceed or at least show different aspects of the original.

Trivial Pursuit the computer game always sounded like a real loser. The essence of the game seemed too fragile to be recreated on a computer. Part of the fun is arguing about whether or not an answer is correct, letting people off and giving (or refusing to give) hints. How do you code that?

The answer is you don't try. Domark decided not to make the computer in any way check your answer, it just asks the question, you fight about the answer and then press *Enter*.

The computer then tells you the right answer and you press Yes or No depending on whether you were right or not.

It means you can have all the shouting matches you want . . .



Geography

Q What's where?

A First of all there are the main menu screens which you can revert to at any time. Then there is the main screen of the board which alternates with the drawing room 'question asking' scene whilst you are actually playing.

The actual board takes up about two-thirds of the screen and has been changed from the original so that it is now a rectangular shape. To the right are wedge information details. Below is list of the subject titles which you can move around with a joystick, highlighting those which represent possible squares for you to land on.

On the Question Screen the bottom two-thirds display the drawing room in which TP asks the questions. The upper half is where the actual question is printed. When a question features a visual display the projection screen hangs down from the top of the drawing-room screen.

If you choose the analysis option then a series of simple bar graphs appear indicating who is getting most questions right and on what subjects.

Art and Literature



Q Has Domark retained the original questions?

A Some of them. Ardent **Trivial Pursuit** (board game) players will recognise a few but, to Domark's credit, many new questions have been developed.

Q Such as?

A Questions that can use the sound and graphics of the machine. For example, questions on geography use visual ideas like recognising a country from an abstract geometrical representation of it.

Q Other examples?

A Music questions where tunes are played using the *Beep*.

The graphics are not bad at all. I particularly like the way a projection screen comes down in the usual drawing room and the graphic shape is superimposed on that. Again it reflects effort and attention to detail. There are all sorts of little things you notice after playing the game a while. Question time is measured by a candle in the drawing room gradually burning down, the hands move on the grandfather clock showing how long the game has lasted so far. If you have a music question little lights wink on the hi-fi.

The board is a reasonable representation of the real thing and after your dice throw all the squares you could move are shown by flashing squares on the board. Confusing at first but you do get used to it.

Other displays show what wedges you have and how close to completion other players are.

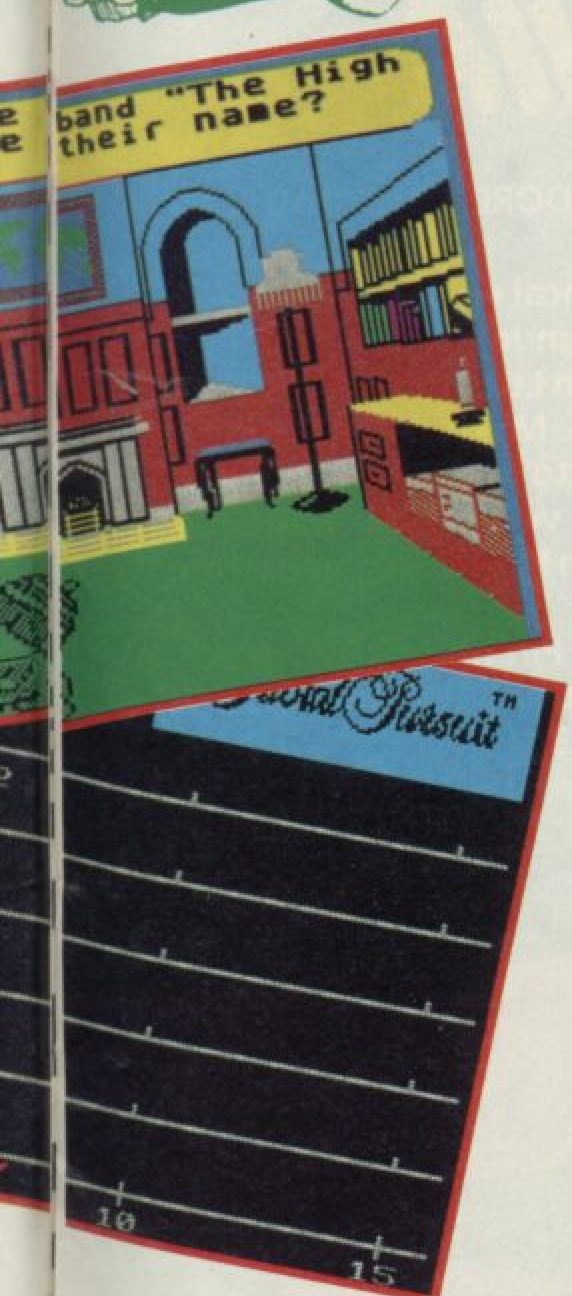


SINCLAIR USER CLASSIC



VIAL
RSUIT





Sport

Q How many people can play **Trivial Pursuit**?

A Up to six.

Q Can one person play alone?

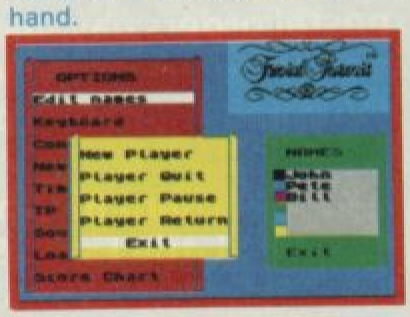
A Yes, provided you are honest about whether you are cheating or not.

Q Do you play against the computer?

A No, it just keeps track of how many you get right and times you.

Q Can new players join in once the game has started?

A Yes, there is a special facility to enable this. You can also change the names of players at any time if someone 'takes over' someone else's hand.



Trivial Pursuit, the computer game, is about as sporting as the original. The questions are set at about the same level of difficulty as the original.

As ever there are sometimes clues in the question and much of the time an intelligent guess may be enough to win the point. Remembering old television programs and the top twenty from 1964 will help too.

Domark promises future specialised versions of the game, ie new add-on data tapes, **Baby Boomer** and so on, just like the board game. These are planned for the new year.

Science and nature

Q How is **Trivial Pursuit** presented?

A The box contains two cassettes, the game as such including a few hundred questions and an extra cassette containing 3,000 more questions.

Q What is remarkable about the question tape?

A It uses some new system called Uniload which means the one data cassette tape is good for several computers. Other data tapes are promised, too.

Q What input system has been used when playing the game?

A Lots of menus where options are highlighted using joystick commands, although you may use the keyboard if you wish. Very neat.

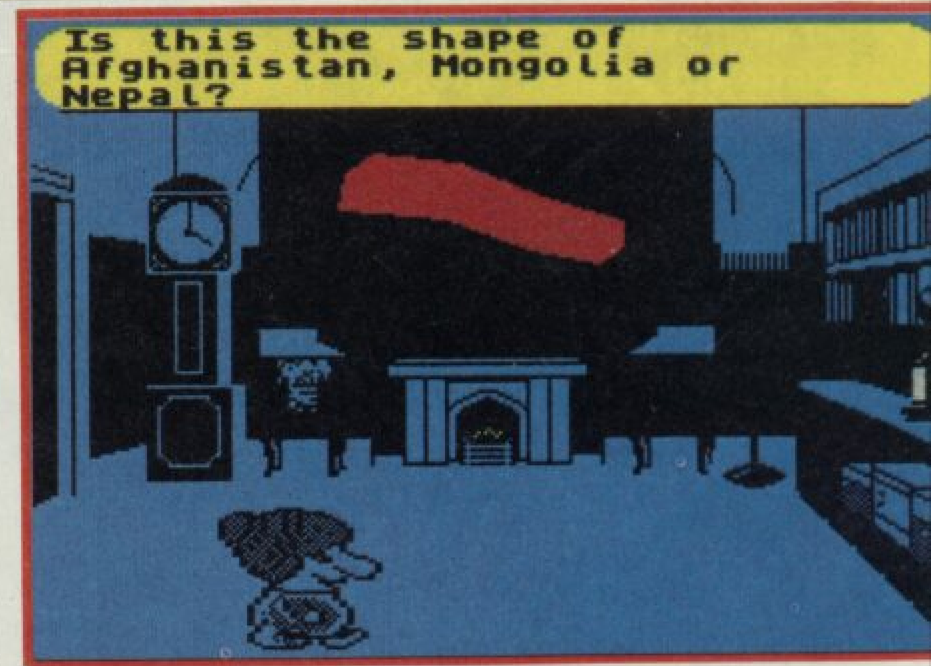
In the opening menu you enter the names of the players and select other basic options like sound-on and whether there will be a time limit on answers (a digital clock clicks the seconds away). Here too you may load up new question files (although you may be instructed to do this automatically by the game should a category of questions

STRATEGY SIMULATION REVIEW

become depleted). A last option — Analysis — provides a detailed analysis of who is getting most questions right and on what subject. This can be invaluable when it comes to finding a player's weak spot on the final question . . .

More evidence that Domark has really tried with this one is a character called TP who acts as quiz master and dart thrower. Let me explain . . .

Having selected your subject option, the board screen disappears to reveal an elegant drawing room. In strides TP, a large nosed, er thing, that wears a variety of different hats depending on what category of question is being asked. It bleeps and there are clip clop sound effects for footsteps. If you take too long to answer TP strides up and down and taps his foot.



Entertainment

Q Is **Trivial Pursuit** (the computer game) entertaining?

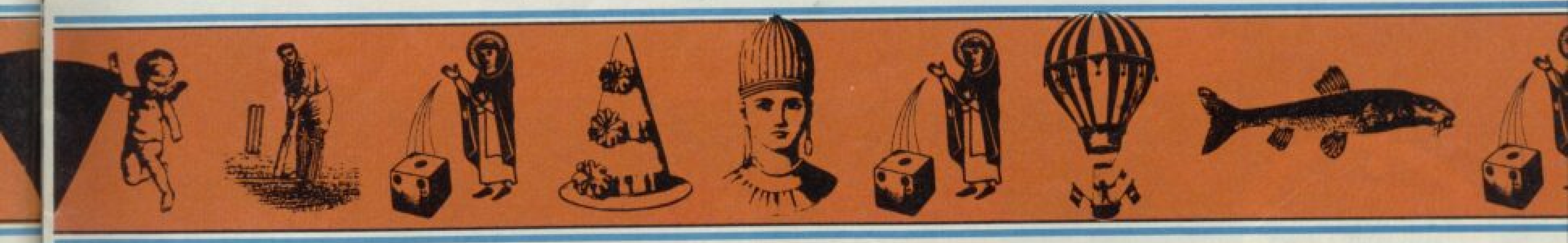
A Yes, incredibly so. It'll be the perfect Christmas present for aunts and uncles not sure exactly what sort of software to buy and it may even get the whole family sitting around the Yuletide monitor screen.

Q Is it a Classic?

A It certainly is.

Q Is this a turn up for the books?

A You're telling me ■



THE TRAP DOOR

MONSTER MANIA

Cans of worms, boiled slimies, and eyeball crush are just some of the delicacies demanded by bumbling Berk's bellowing boss. Can you satisfy the hunger of 'him upstairs' and survive the nasties that come out of the Trap Door? There's always something lurking in the dark waiting to emerge in this hilarious graphic adventure.

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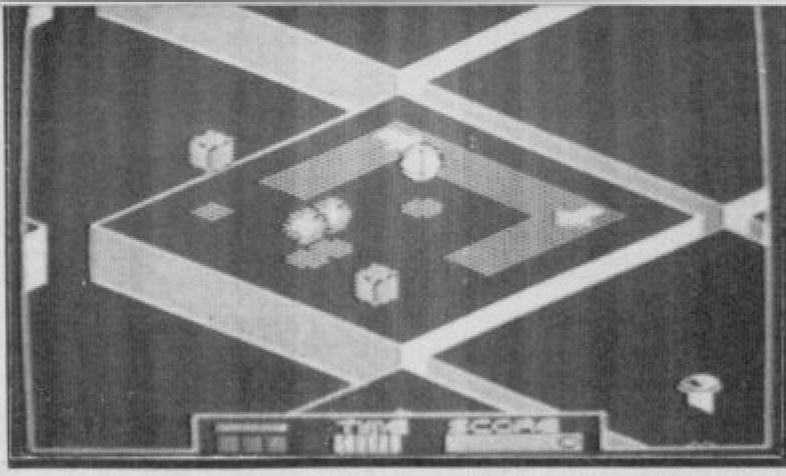


YOUR SINCLAIR MEGAGAME

SINCLAIR USER CLASSIC

Piranha

ARCADE REVIEW



The days of the bouncing ball are not over yet. We've had a couple of games already on this theme — Gremlin's **Bounder** and Mirrorsoft's **Action Reflex** — but **Revolution** knocks the spots off the opposition.

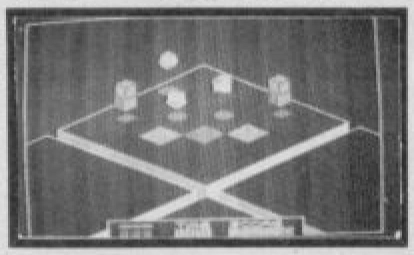
Very much in the Vortex style of clear, monochrome graphics and superb 3D effects, **Revolution** depends on a logical thought process and a lot of

REVOLUTION

patience. It held me enthralled, and I didn't even get near the harder levels of the game.

You control a ball which has four levels of graded bounce — it's essential to get the hang of the bounce if you're to complete the four infuriating puzzles to be found on each level. The puzzles are easy to spot, and if you're in difficulty they're well signposted on a map of the area which you can turn to at any time. They consist of two grey blocks which might or might not be hidden from view, protected by deadly fuzz balls or sliding blocks and you've got to bounce over, touch one and nip across to the other to make them disappear. If you're slow (and we're talking split seconds here) the blocks turn back to grey and you'll have start over again. And then there's the time limit to worry about. That ticks away steadily, heedless of your mistakes and failures.

The ball's quite easy to control — it doesn't bounce off out of control at the first available opportunity, and if the joystick is held still the ball remains happily on one spot. That is unless it catches the edge of the slab (each level consists of a number of large slabs with gaps between) and



▲ Touch the two square cubes ● Note the sliding grid ● Beware the fuzzballs — they're deadly

◄ Double bounce squares may help you here ● Spinning tops are a hindrance

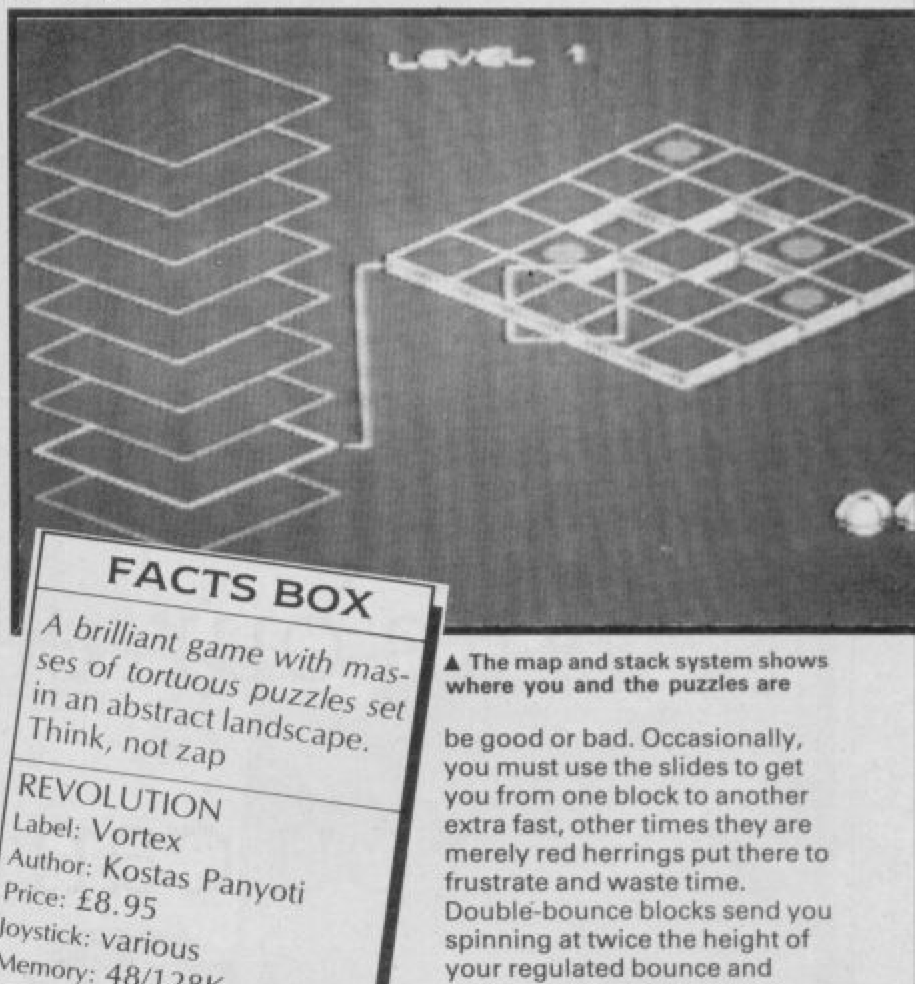
then the ball tends to rebound at a wild angle into the distance. More likely you'll slip over the edge into a yawning gap and disappear into space.

There are eight levels in the stack and each contains four puzzles. To move up a level you have to make all the grey blocks disappear within the time limit. Of the 32 puzzles some are simple, others are downright impossible and each level holds a good mix of both.

On high levels — six, seven and eight — there is only one possible solution within the limited time.

Revolution isn't just about bouncing a ball round slabs knocking out the grey blocks. Vortex has included spinning tops which can shove you out of the way and which, on occasion, you'll need to ride in order to get to outlying slabs. It's vital to get the hang of this as in later stages of the game, a number of slabs are missing from each level, separated from the main area by a huge chasm. The only way to cross to the isolated slab will be on top of the spinning top. Other spinning tops are inverted and tend to do more harm than good.

Now a mention of the mysteries of fuzz balls, sliding blocks and double bounce blocks which tend to be located round the puzzles. Fuzz balls are deadly if touched and you'll lose a life. Unfortunate because they often surround a grey block, so a careful leap at the right bounce height is essential. Sliding blocks tend to kill the bound and whisk you off in the direction of the arrow. This can



▲ The map and stack system shows where you and the puzzles are

be good or bad. Occasionally, you must use the slides to get you from one block to another extra fast, other times they are merely red herrings put there to frustrate and waste time. Double-bounce blocks send you spinning at twice the height of your regulated bounce and again can be used to solve a puzzle in extra fast time.

The graphics are sparse, small and incredibly detailed. Your ball even gives the impression of rotating as it bounces along. Because there's one colour there are no attribute problems, just as well because this precisely engineered game would be impossible with colour clash and fuzzy outlines.

There's so much going on for such a deceptively simple game. And rest assured that if you like working things out and need more of a challenge then the 11th version of a thumb-numbing Rambo-esque copy, look no further.

Revolution is fabulous ■

FACTS BOX

A brilliant game with masses of tortuous puzzles set in an abstract landscape. Think, not zap

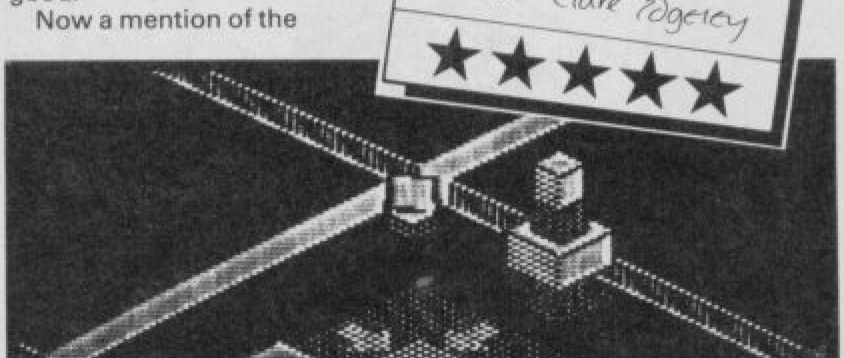
REVOLUTION
Label: Vortex
Author: Kostas Panyoti
Price: £8.95
Joystick: various
Memory: 48/128K

Reviewer: Clare Edgeley

★★★★★

HINTS AND TIPS

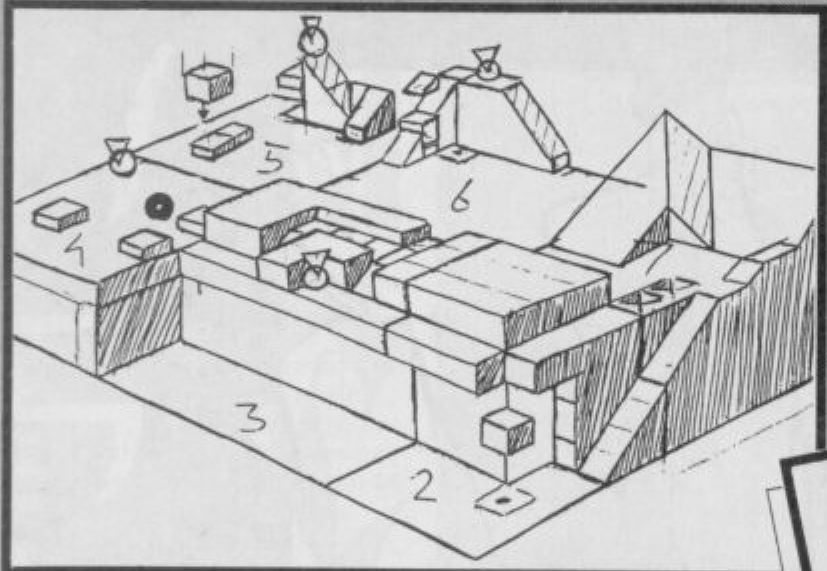
● Grade the bounce of your ball to at least match the height of the object you are attempting to bounce onto or touch.
● Remember that sliding grids kill your bounce. That can be quicker than doing it manually.
● If necessary use the pause button to study a particularly obnoxious puzzle in your own time.
● Look carefully, at the double bounce squares (white as opposed to grey) as they are often there for a purpose.
● A solution to a puzzle on a lower level isn't necessarily the right one to use on a higher level.
● Don't forget, sometimes parts of the puzzles are there to mislead — they don't help you solve it at all.



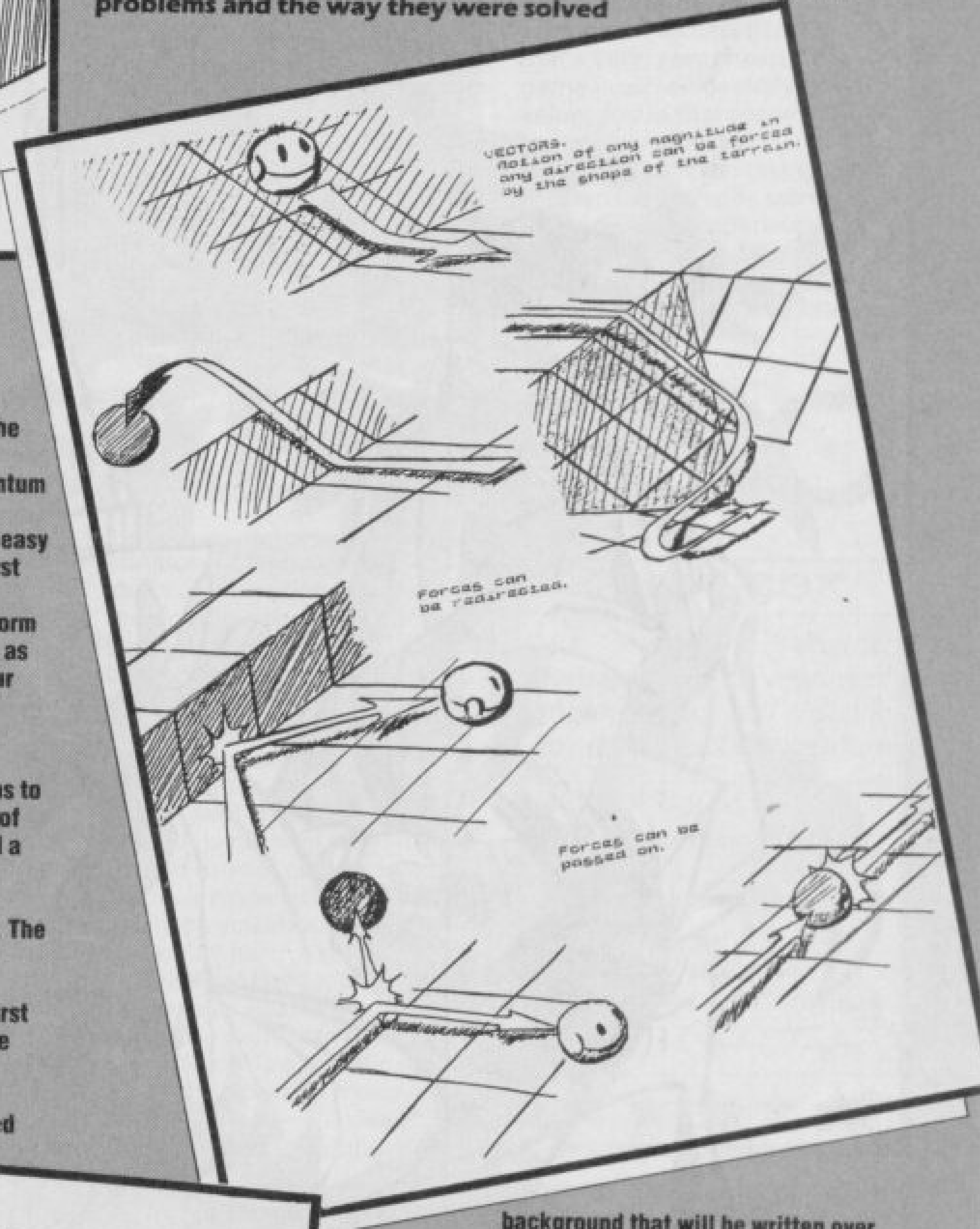
SINCLAIR USER CLASSIC

BACKGROUND NOISE

Backgrond Noise looks behind the top games of the moment and speaks to the programmers who sweated blood to produce them. Background Noise looks from the author's point of view — at the particular programming problems and the way they were solved



▲ An early version of the Botty layout.



Vectors and forces in the planning stage ►

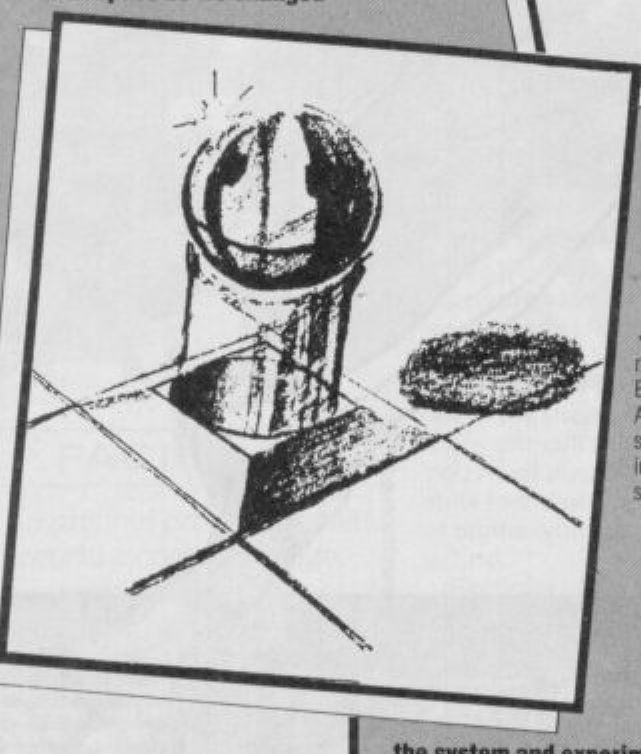
"Its hard to believe now so many months after the project began, but Bobby Bearing began life as an action-packed arcade style game inspired by Q-BERT! In fact originally it wasn't intended for commercial sale at all.

Even though the game didn't really have much resemblance to Q-Bert, we were really pleased with the final result. The funny thing is, though, that there was no sense in which Bobby was based on Marble Madness, or any home micro game such as Gyroscope, and especially not Spindizzy! Bobby was more than 50% finished and looking very much as it does in the final commercial version almost a year ago now, and was around 18 months in the making. In fact we hadn't heard of Marble Madness and Spin Dizzy until we spoke to The Edge. In fact, acknowlegements for inspiration are really due to Knightlore by Ultimate.

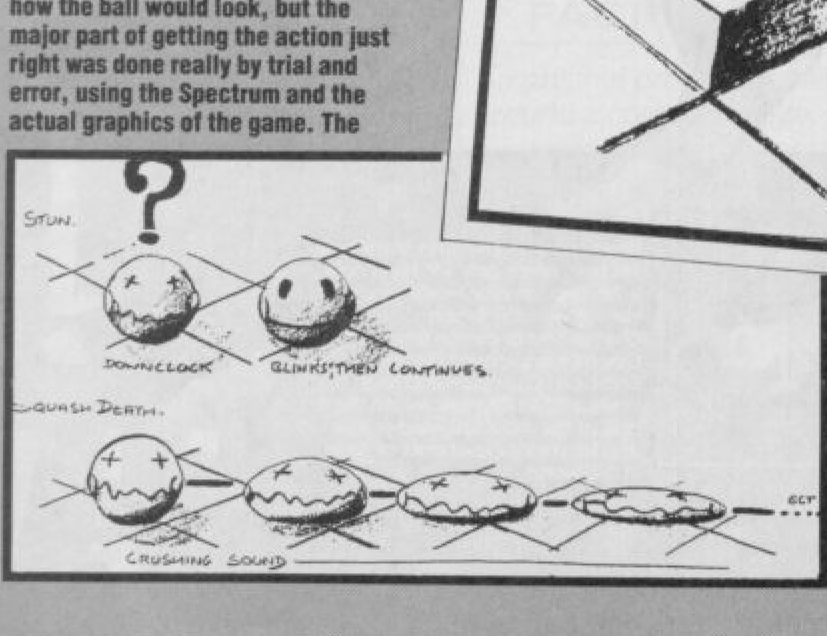
Like many computer games, Bobby grew and grew in the making. The key element in the game was of course the 3D routines and the actual movement and behaviour of the balls themselves. We really wanted a game which would play at 'arcade' speeds and which had believable 3D movement in curved space. You might imagine we went back to physics textbooks to work out how the bearing should move, but in fact we took a more practical approach: just imagining how a ball would look and behave when it was rolling around the type of landscapes we were programming into the game!

We did sketches, of course, of how the ball would look, but the major part of getting the action just right was done really by trial and error, using the Spectrum and the actual graphics of the game. The major programming tasks we faced were the 3D curvature, the movement of Bobby, and such factors as vectoring (the momentum and rolling of the balls). Surprisingly, the curvature was easy to program — it fell together first time for us, and was actually completed in virtually its final form along with basic screen layouts as long ago as within a month of our starting to write.

The actual contouring of the round shapes was solved quite simply. In essence all we did was to treat the curves as a collection of many smaller contours and used a stepping method with a look-up table to translate the data into actual movement on the screen. The 3D programming itself, actually putting the graphics onto the screen, took more thought. At first we were using three screens (the screen you see, and two others stored in Ram). This was very wasteful on space so we changed the system and experimented using windowing, where we saved only that part of the basic background which needed to be saved at any one time. The method involves the program deciding what will be seen on the screen, then doing a kind of bubble sort to determine the priority of images on the screen, finally saving just those areas of background that will be written over and need to be replaced. By using this method we got away with about a 1K windowing buffer.



◄ Bobby meets an air duct
Bottom left: Animated sequences including the grim squash death



The vectoring — actually getting the momentum and roll of the balls looking realistic and true to 'physics' — was by far the hardest problem though. It was achieved by monitoring the contour tables to determine which parts of the ball were in contact with the surface at any given moment, and translating this into a roll-down and momentum effect on the screen.

On balance, we're pretty pleased with the result, but can see how much more could have been achieved if we'd had more time, and we were particularly sorry not to have been able to make more of the complex routines we'd worked out for varying the momentum and vectoring of the balls. At the moment we are looking very seriously at taking up where we left off and seeing whethere some of the more 'radical' new ideas that didn't quite make it into the finished version could be the basis for a Bobby II"

Robert + Trevor Figgins

UCHI-MATA



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Technical consultant, Brian Jacks, completing a successful UCHI-MATA, one of the many exciting throws incorporated in the game.

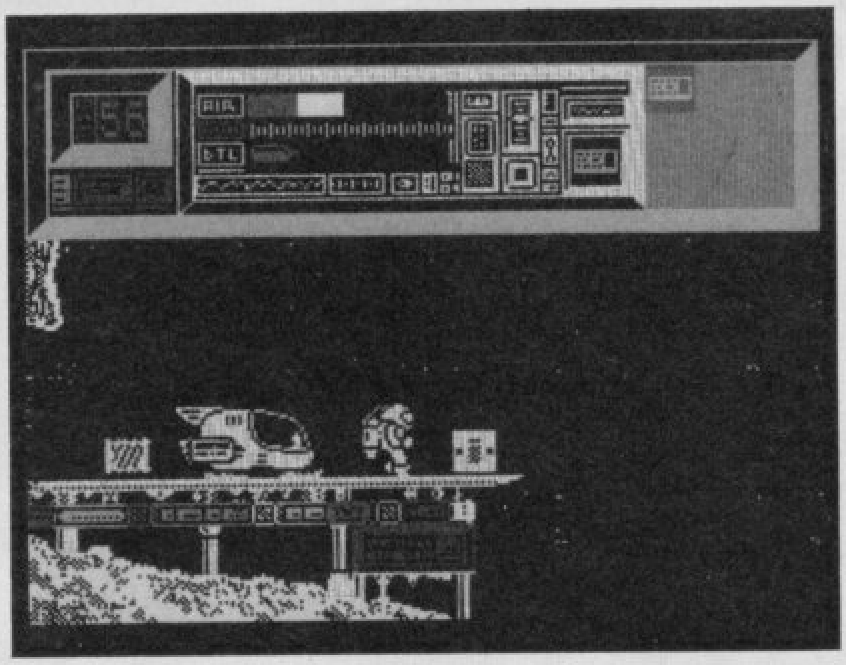
Brian Jacks received his black belt, 1st Dan, when only 15. He is now a 7th Dan, an elite world group. Having won the British Championship eleven times, the Open Championshp five times, the European Championship four times and an Olympic Medal, he is one of the most knowledgeable and foremost exponents of Judo in the world.

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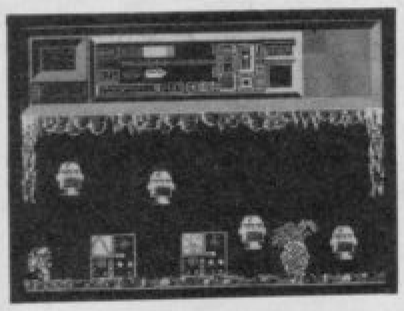
BUDGET
£1·99 £2·99

UNIVERSAL HERO



It's getting very difficult to find exciting new ways of describing games which essentially repeat the same formula over and over again.

I mean, how can you disguise the fact that **Universal Hero** has approximately the same plot as **Spellbound** and all those countless other Mastertronic titles where you move your man around, collecting objects, some of which are useful for solving puzzles, opening



doorways etc, whilst looking for spare parts to repair your shuttle which will otherwise not be able to repair a space freighter which is out of control and . . . (cont page 211).

Anyway, it's bounce, collect, select, and use time again, but as such things go **Universal Hero** is considerably better than most of the competition. For one thing the graphics are large and don't flicker — you don't even notice attribute problems overmuch. For another, I managed to solve a couple of the puzzles within an hour which always cheers me up.

Universal Hero is a kind of Jetman figure and his jumps are controlled by jetpack so they have that slow motion look. There is an interesting mix of landscapes — a few tedious all-purpose caverns admittedly but also some detailed surface areas and control rooms.

You may carry nine items and you will find many more, what is and isn't useful is by no means readily apparent. In addition, sometimes it seems that a combination of objects is required to clear an obstacle. For example, one route was blocked by a fall of rocks, using the dynamite alone was pretty much a damp squid but if I was carrying the plunger as well . . .

Time limits are mandatory on games such as this. In this case your air is running out — if it should run out completely you get the exasperating advice, 'perhaps you should have filled up somewhere'. I know that.

Universal Hero is quite clever, I especially liked the fact that some problems can be solved by performing a specific action in another location many screens away — it'll take some thought but so far none of the puzzles I've discovered has actually been unfair (not so some other games where picking up some onions and dropping them on a frog opens the security door . . .)

In any event, **Universal Hero** once again poses the classic Mastertronic reviewing problem — it costs £1.99 — that's very, very cheap. The game is self evidentally good value, and in that sense difficult to sensibly criticise. Nevertheless even taking other Mastertronic arcade adventures as a point of comparison, it's still recommended ■

◄ One damaged shuttle. Two objects that probably won't help at all. . .

FACTS BOX

Not terribly original perhaps, but a very well implemented and visually appealing space adventure

UNIVERSAL HERO
Label: Mastertronic
Author: Xcel
Price: £1.99
Joystick: various
Memory: 48/128K

Reviewer: Graham Taylor

★★★★★

OCTAGON SQUAD

Octagon Squad is complicated. It uses icons — the user friendly front end system of graphic images that nearly always makes things very, very confusing. There is an additional problem with **Octagon Squad** — the instructions were written by a minimalist of some sort. Either that or someone who couldn't understand the game either.

In fact, there are instructions, they crop up at the beginning of the game, although you have to wait for them and they reveal just what each icon is supposed to indicate, this or squinting at the cover pics will save you around three hours of frustration. Handy tip eh?

FACTS BOX

An original program based around a complex maze. Strategic but needs more instructions

OCTAGON SQUAD
Label: Mastertronic
Author: Geoff Foley
Price: £1.99
Joystick: various
Memory: 48/128K

Reviewer: Graham Taylor

★★★☆☆

After much fiddling I realised that **Octagon Squad** is essentially an exercise in map making, and coordinating several things at once.

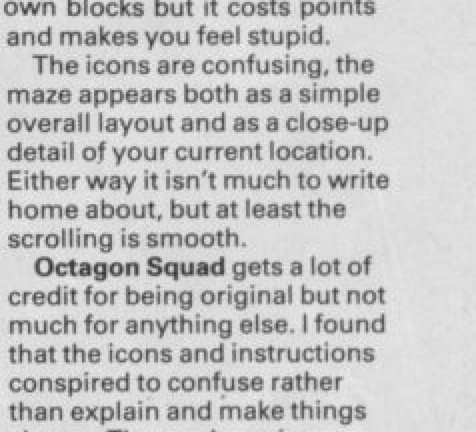
The plot involves getting survivors out of a reactor maze via a teleport fence. This involves both finding the survivors and finding your way out of the maze. This is even more difficult than it sounds. You must also block off the exits to the maze using a series of tables which again, you have to find.

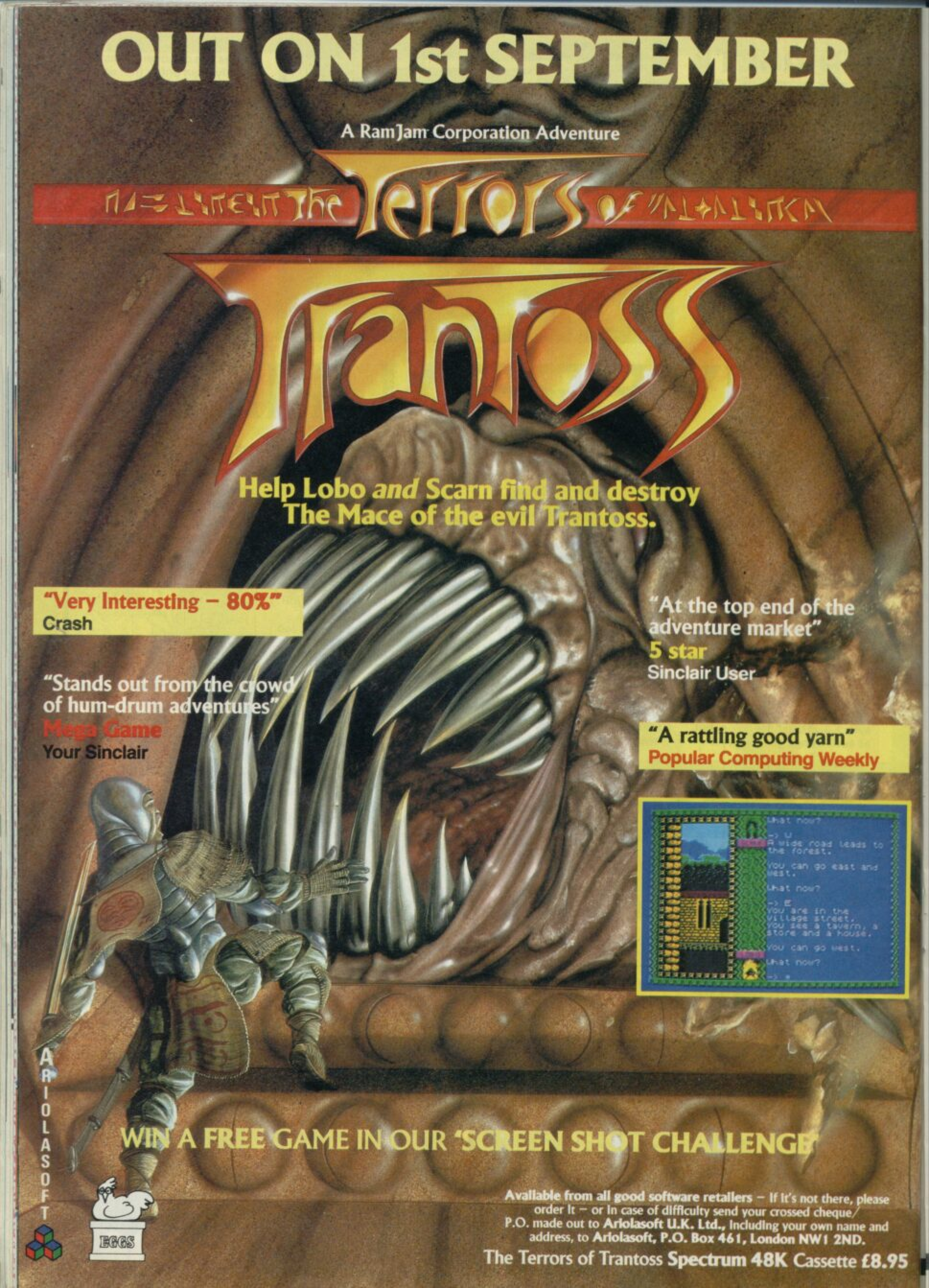
Sections of the maze are blocked by doors, you must find a key in the matching colour to open them. Gradually the energy of each of the members of your team is dissipated from much wandering around the maze — chemical residue according to the blurb. Restore energy by finding drinking fountains.

Using the tables to block off the exit revels another aspect to the strategic element of the game — it is quite possible to block your escape route — there is a way of getting past your own blocks but it costs points and makes you feel stupid.

The icons are confusing, the maze appears both as a simple overall layout and as a close-up detail of your current location. Either way it isn't much to write home about, but at least the scrolling is smooth.

Octagon Squad gets a lot of credit for being original but not much for anything else. I found that the icons and instructions conspired to confuse rather than explain and make things clearer. Those who enjoy having their brain addled may find more in it ■




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What now?
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LAP OF THE GODS

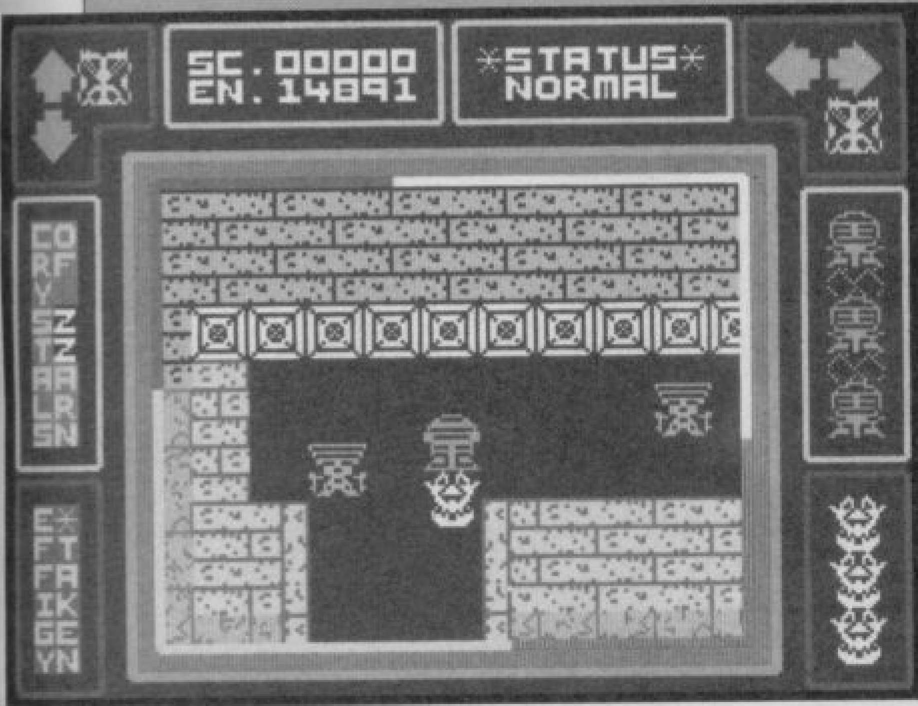
BUDGET £1·99 £2·99

Lap of the Gods is a maze game for sorts, and for a change it involves no blasting or zapping.

It's all about appeasing the Gods of Zzarn and retrieving for them some buried crystals.

So you zoom round a series of mazes the first is small and simple — picking up three effigies in each putting them into a storage chamber. Then collect the crystal and push off the next to do much the same thing.

That's basically all there is to it, yet it's a tricky little devil to play. The corridors of the labyrinth are patrolled by green and blue monsters and if you get touched three times while holding an effigy it'll be taken from you. Frustrating. And on occasion they'll also relieve you of any goodies you might be carrying like Yellow Slab Acid and Blue Block Digger.



These may sound daft but they're vital if you're to retrieve the buried crystals. The name of the object is a good indication of where to look to find the crystal. The effigies are colour-coded and when you've managed to get three into storage, you can access the menu to find what gifts the Gods have given you to retrieve these precious stones, and also access the teleport facility. To teleport take an effigy and you'll be whisked off to the land it belongs to.

This will be a larger maze and they get more complex with tortuous routes the deeper you travel through the game.

When starting off in a new maze it's a good idea to suss out the area and find the entrances and exits to the storage chambers. You need to know the route pretty thoroughly to avoid getting lost and caught.

Lap of the Gods is a pick up and dodge game with a few additional extras thrown in for good measure. The fact it is so difficult and frustrating lifts it a little above average, though ■

FACTS BOX

A pick up and dodge maze game. Even though it's got really quite simple graphics it's very tricky

Lap of the Gods
Label: Mastertronic
Author: Clive Brooker
Joystick: Kempston, Sinclair
Memory: 48/128K

Reviewer: Clare Edgeley

★★★☆☆

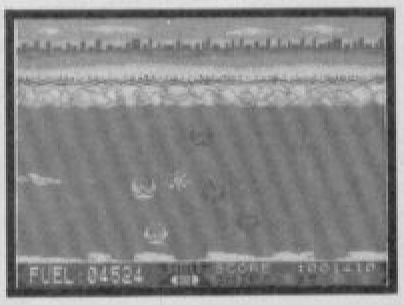
BUCCANEER

I think Firebird must be trying to corner the market in the very, very tedious wave after wave genre of arcade game. The kind of thing we used to have to endure before people discovered how to program properly. Last month it was **Cosmic Firebirds** or some such, this time we have **Buccaneer** — 'you must shoot down all the aliens before progressing to the next wave,' it says in the blurb. They tell no lies.

We have aliens in various shapes including rabbits, cooking equipment and, most horrible of all, frogs. All seem to follow exactly the same attack formation (the bouncing up and down one), all fire missiles on a sporadic basis. Every so often a deadly heat seeking metallic thing comes flickering towards you. It's very threatening.

Sometimes you have to refuel by docking with a sort of silver boomerang, in later stages deadly meteors and Rota-droids which cannot be destroyed by your photon blasts (they look quite weedy actually) come hurtling towards you. By this time you probably won't care either way.

Graphics are tedious and can barely even be described as animated since all they do is waft up and down. The central playing area is blue, and the top and bottom edges depict a scrolling landscape that seems to belong to another game. I was so enthralled by **Buccaneer** I found myself reading the foreign translations of the box artwork. Did you know the Dutch (maybe it's Swedish) for "Shoot" is "Schiet". Seems appropriate ■



FACTS BOX

Terminally dull, completely tedious, repetitive and thoroughly unoriginal. Don't buy this game

BUCCANEER
Label: Firebird
Author: Team
Price: £1.99
Joystick: various
Memory: 48/128K

Reviewer: Graham Taylor

★☆☆☆☆

KANE

Kane is a wild west arcade game in four sections. Although mostly one to file under the 'dire' category, there is some oddly effective animation here and there.

I like games where there is no serious attempt to impose a plot on what is obviously a plotless game. There are four sections, but apart from being wild west orientated there is no other link between them so you can regard them as separate.

Game one is a duck shoot, apparently the Indians like them so bagging a few earns you extra lives. Position the cursor to sort out your fire angle and work out when to release your bow. Nice animated figure of the bowman — everything else stinks.



Game two is running and jumping on your horse, dodge the rocks by timing your jumps, tedious but very nice horse animation.

Game three is a shootout, you stand, poised in authentic wild west manner in the middle of town, and from shop fronts, roofs and behind buildings outlaws suddenly appear — shoot them before they shoot you. The animation is again quite effective, and I think this is probably the best part of the program.

The last section is more horsey running and jumping, though this time your objective is to reach the front of a speeding train. Same comments as part two.

Kane is nothing special, even in a budget range, but the occasional flashes of effort, as evidenced in the animation lift it a few notches above the run of the mill. I wouldn't actually recommend you go out and buy it though ■

FACTS BOX

Dull wild west potporri — really four games in one. Redeemed here and there by some good animation

KANE
Label: Mastertronic
Author: John Darnell, Simon Freeman
Joystick: various
Memory: 48/128K

Reviewer: Graham Taylor

★★☆☆☆

REBEL STAR

BUDGET £1·99 £2·99 REVIEW

FACTS BOX

Clever strategy game with some adventuring elements. Nicely designed and astonishing value

REBEL STAR
Label: Firebird
Author: J Gollop
Price: £1.99
Memory: 48/128K

Reviewer: Graham Taylor

★★★★★

One from Firebird's £1.99 range, but unlike some of the terminally dull arcade offerings the company has released this one's a moderately interesting strategy game.

The term strategy covers a multitude of programming sins, but **Rebel Star** is closely based on 'real' strategy games where you work out the winners and losers according to some calculations and strict rules.

To do anything in **Rebel Star** you need to acquire points, using the points available among the members of your team is the art of the game.

The plot is relatively simple, one side tries to take over Moonbase Delta, (wasn't there a Moonbase Alpha some where in TV history?), the other side tries to defend. You may run it as a two player game or with the computer controlling the defences.

You take turns and within each turn there are three possible modes-cursor mode where you select members of each team and assess strengths, select mode where you may decide to move, get an object, drop an object, load a weapon or fire mode where you get to do what you wanted to do all along and kill something. You need energy to fire and may either direct your fire, or select a line of fire and wait for the enemy to cross it in his turn. What sort of destruction is achieved depends on a mixture of factors derived ultimately from the energy status of the firing unit.

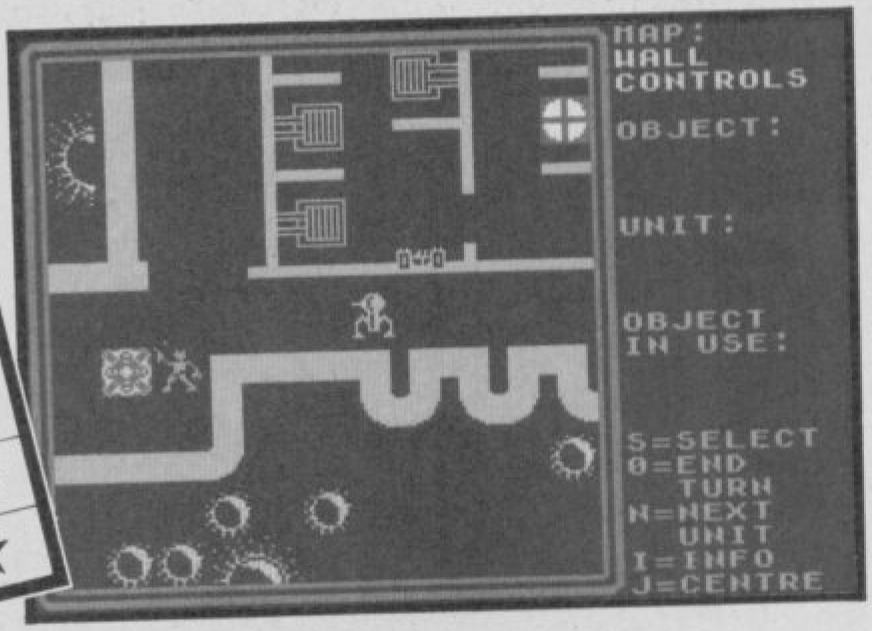
There are more conventional adventure elements in the game as well, objects to be found and used, some of which will heal wounded humans, some open particular doors and so on.

This really is a true strategy game, as you play you discover that certain kinds of unit are good at some things and useless at others, just as certain areas of the moonbase are more easy to enter than others. It is quite easy to waste an awful lot of points.

On screen the game is schematic and functional rather than Gosh, Wow, although some of the designs are quite appealing — I particularly liked the combat droids. The moonbase is represented in blueprint form restricted to outlines of walls and doors. The playing area is large and varied and the range of options within a move quite considerable.

Playing against the computer proved little since I am lousy at this sort of game anyway — it thrashed me.

Astonishing value in a budget title and a real treat for strategy addicts fed up with recreating the Battle of Britain ■



▲ Complex strategy and adventure in Rebel Star

STORM

FACTS BOX

The first Gauntlet clone, Storm is a challenging maze game which offers great value for money

STORM
Label: Mastertronic
Price: £1.99
Joystick: various
Memory: 48/128K

Reviewer: Clare Edgeley

★★★★☆

Gauntlet fever has struck, and it looks as if at least two look-a-likes, **Storm** and **Droids** will be on the streets long before US Gold brings out the official game, licensed from Atari, in November.

Mastertronic's **Storm** is already out and though a little slow, you can see at a glance where the idea came from.

Storyline aside, it's a one or two player game played in the now well-known Gauntletesque maze. You look down on a labyrinth of corridors from a bird's eye view, which gives the characters a strange stunted look. At first what you appear to be controlling looks like a pair of bull's horns. It was only a few confused moments later that I realised I was in fact looking at a pair of curved arms from above.

Once I'd adjusted my viewpoint the visual logic of the game fell into place. (Funnily enough though, a chicken leg, from above, looks exactly like a chicken leg from the side, but enough of the pedantics.)

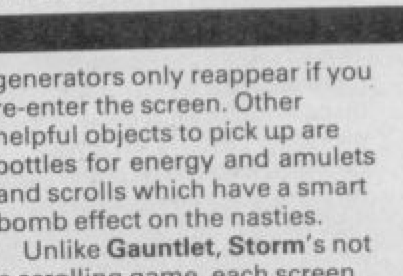


Storm, given its budget tag is an excellent game. Rush round the maze killing off the nasties which spring from generators (familiar?) If you persist, you can blast the generators, or use a magic mask spell to get rid of them all in one fell swoop. The generators only reappear if you re-enter the screen. Other helpful objects to pick up are bottles for energy and amulets and scrolls which have a smart bomb effect on the nasties.

◄ Things look bad, but maybe you can make it to the scroll and energy bottle in time

Unlike **Gauntlet**, **Storm**'s not a scrolling game, each screen contains one section of the maze, with a number of exits to the next area. It looks like it needs careful mapping. To get into the wizard's laboratory, you need to collect three snake broaches, though what you do once you've got into the lab is anyone's guess. I didn't get that far.

Your ultimate quest is to rescue yet another helpless princess, who's been hidden somewhere in the wizard's lair. You've only got a few lives and time is limited. For a basic, up, down, left, right and fire, **Storm** offers a challenge and is great value ■




GREMLIN
WHATEVER WE DO..... .....WE DO IT BETTER!
Footballer of the Year
The game to answer every boyhood dream – the chance to make it to the very top of football stardom. Starting on your path to glory as a 17 year old apprentice with a Fourth Division team and only £500 and 10 goal scoring cards in your pockets, the footballing world is at your feet. Adopt the identity of a professional footballer and develop a career through the ups and downs of match days, transfer deals and injuries etc. Display your talents in Football League, E.U.F.A., F.A. and Milk Cup games and then if you're good enough the ultimate accolade of your sport, the Footballer of the Year Award.
Future Knight & Trailblazer are not available on BBC/Electron.
C16 + 4
£6.95
MSX Spectrum 48K
£7.95
Amstrad, BBC/Electron Atari, CBM 64/128
£9.95
Disk
£14.95
FOOTBALLER OF THE YEAR
Future Knight
Arise Sir Randolph to take up the challenge of death that has befallen the fair maid Amelia, held in the evil clutches of Spegbott the Terrible. Acting upon an inter-dimensional distress signal from the galactic cruiser SS Rustbucket, don your Omnibott Mark V attack suit and venture forth in pursuit of your beloved's captors. Defend yourself nobly against the Berserka Security droids. Fight your way through 20 gruelling levels onto the planet's surface into Spegbott's castle where the fate of Amelia lies with the outcome of your mortal combat with the awesome Henchodroid. Is there any gallantry and bravery left in this modern day universe?
Trailblazer
Thunder into the unknown at a breakneck speed, pushing your reflexes to their limits in this definitely exhilarating journey that's not one for the fainthearted. Roll left, roll right avoiding the endless chasms of doom that lay in and around the squares of mystery. Squares that will sometimes slow your progress, on occasion with fatal consequences and sometimes speed up unexpectedly or make you jump automatically. Keep a keen eye on the clock as the quicker you complete your task the higher will be your bonus. CBM 64 version is an amazing 2 player simultaneous game. Amstrad Disc version contains extra features.
Available November!
Future Knight
Gremlin Graphics Software Ltd.,
Alpha House, 10 Carver Street, Sheffield S1 4FS. Tel: (0742) 753423
Trailblazer
Available November!

Is this the greatest Spectrum ever? Graham Taylor reviews the first Amstrad Sinclair — the Spectrum 128K+2

REMAKE REMODEL

I have seen the future of Spectrum home computing and its name is the 128K+2.

It looks good and it feels right. The Spectrum 128K+2 is everything it was hoped the Spectrum 128 would be and more.

Although it is Amstrad's declared intention to push it as a home entertainment (=games) machine the 128K+2 actually looks serious and businesslike. There has never been a Spectrum machine more suitable for serious uses, but equally there has never been a Spectrum machine more suitable for games.

It costs £149 and that's very cheap. Grey is a new colour for Sinclair. Pre-Amstrad machines could be any colour as long as it was black. The new machine is smart battleship grey. The expected tape recorder resides in approximately the same position as on the CPC464 — on the right-hand side of the unit. There are, obviously, no volume or tone controls, theoretically at least you need never fiddle with the levels because every load will be at optimum. We'll see.

The machine feels surprisingly light although, apparently, a thicker plastic has been used than in previous Spectrum designs. This causes a few minor interfacing problems but makes the casing sturdier. (See the section on compatibility for more details.)

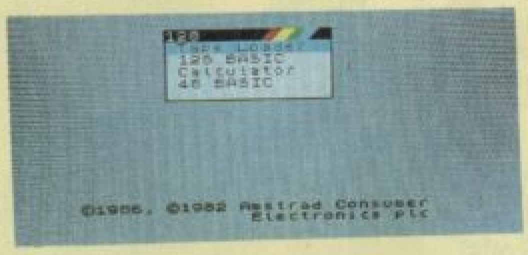
Keyboard

The keyboard is different from any previous Spectrum. It's neither funny rubber key or funny pushbutton. Instead, at last we have a real typewriter keyboard. Full-travel keys that click and an incline to make touch-typing possible. Another aspect of the keyboard strikes you instantly — each key has only one or two legends on it. Almost all of the single keyword entry command words have been removed, those that remain are the most significant ones — *Run, Code, Load* etc. There are specific keys for functions like *Delete, Break*, and *Extended Mode* as with the Spectrum Plus, but each is chunky and substantial. As I say, this is a real keyboard.

On screen

The display is almsot exactly the same as on the 128K Spectrum. There is the same option to switch between Roms, the same calculator option. Just one category is missing on the menu — no tape test — you don't need it.

There is only one other difference you might notice, a changed copyright notice, ©1986, ©1982 Amstrad Consumer Electronics Plc.



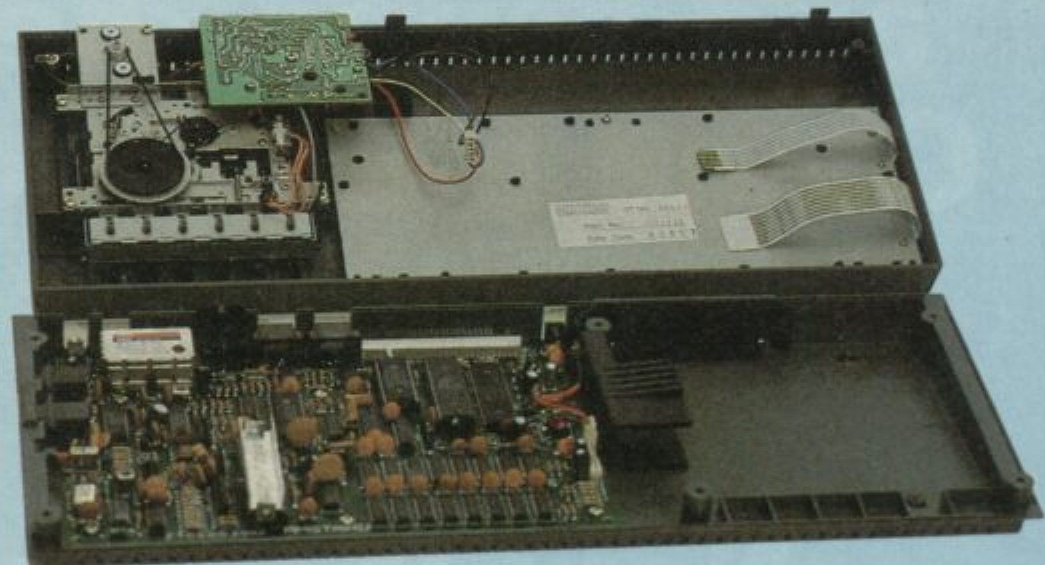
Compatibility

Here is a summary of the key points for those who already have Spectrum equipment:

- Nearly all hardware add-ons should work. The only problem is a physical one of shape. For example, Microdrives have to be prised on carefully with a screwdriver or similar instrument — not too difficult but worth noting. The same problem (caused by the thickness of the plastic) will be true of other peripherals.
- Software should be completely compatible in the sense that if it works on the 128K it'll work on the 128K+2. One possible exception is that if programs







Inside the case

It's easy enough to open up the 128K+2. Undo six screws, unhook the ribbon cables connecting the keyboard and the lead that connects the tape recorder (held in the upper shell) and with a bit of judicious sliding it comes apart.

Amstrad claims the +2 should be more reliable than previous Spectrums, partly because of heat-sink changes. The external heat-sink on the Spectrum 128 (there partly to distinguish the machine) is now tucked inside and the ULA chip has been given a heat sink all of its own. Time will tell if this machine is more reliable, but with Amstrad's track record it certainly ought to be.

Curiously enough, the only physical evidence that this is a machine manufactured by Amstrad (the Sinclair label is the only one used on the outside) is a large chip in the middle of the new circuit board — the 'new' Rom (with changed © line!) which has the Amstrad name stamped on to it. The circuit layout is neat and orderly, the only dramatic differences having to do with the joystick ports.

The upper shell contains the tape recorder and some circuitry to interface it with the machine. Despite a highly visible and possibly vulnerable band connecting the motor to the tape drive, it looks sturdy, better than the tape machine found on the CPC464 in fact.

The manual

With a grey cover to match the machine the manual combines the best of the original Spectrum programming manual with extensively rewritten features to cover the sound facilities and the extended 128K Basic in some detail.

It seems to cover the ground well, doing for the new machine a similar job to that done by the original manual for the good old pregnant calculator itself. I was particularly pleased to see that despite the redesign, the tape, the joysticks and everything else, the programs to throw the *I Ching* and play Pangolins remain in residence and unchanged — almost brings a tear to the eye.

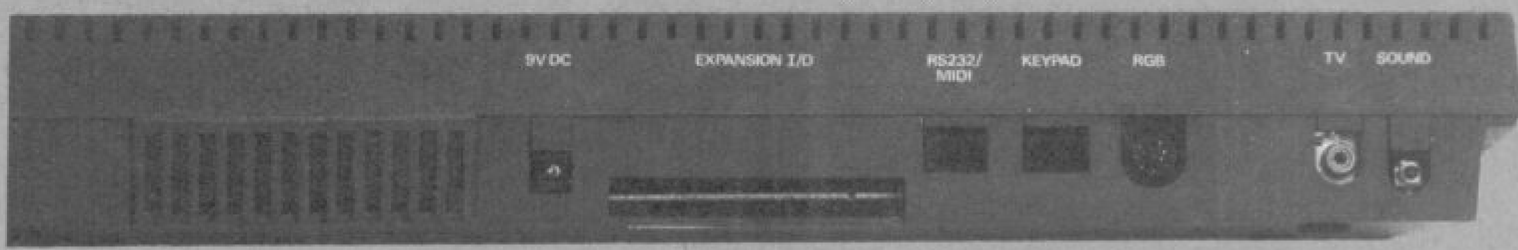
use a check sum to the Rom they will have a problem — the value has changed because of the different copyright notice!

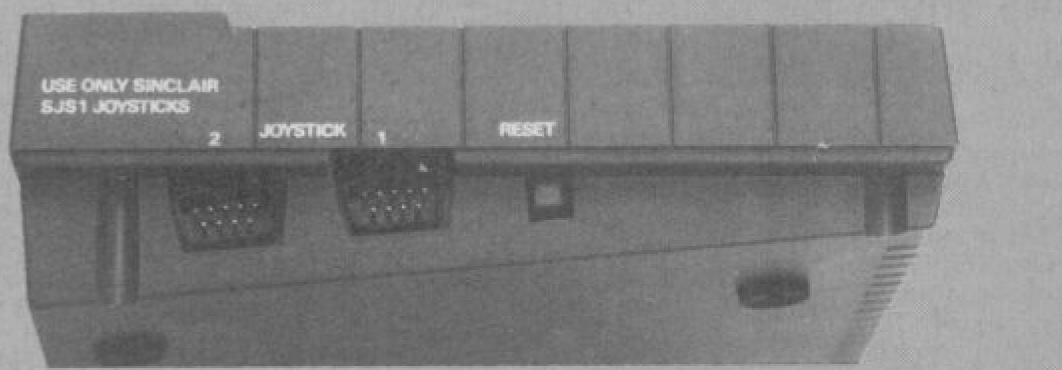
● Your old joysticks won't work and you'll need an Amstrad one until the independent manufacturers get themselves geared up (although you can of course use them in the old way, ie, via any of the standard joystick interfaces plugged into the expansion port). The software standard for joysticks is Interface 2.



Cassette deck

Will it load all my games? Can it deal with hyperloads? The answer is yes, mostly. The tape deck should be no more or less reliable than loading with any other properly aligned, correctly set up datarecorder. It should load just about everything the professional software houses put out, but where a game previously needed odd volume or treble settings to compensate for *Saving* deficiencies you might have problems. There is a small hole through which you can adjust the alignment of the tape but no other controls.





Ports

The back of the machine has all of the ports found on the old 128 including, surprisingly enough, the BT-style sockets for MIDI RS232 and, more bizarre still, the numeric keypad. The MIDI is still OUT only, which means it is only 50 per cent useful, but it's welcome nonetheless. Next to these is the RGB Din-type socket, a TV connection and a new sound output port.

The reason for the new sound port is simple. Because of the built-in cassette deck there are no Ear and Mic sockets and if the computer is used with a monitor, sound output has to be taken from somewhere. The standard Spectrum edge connector I/O port is placed centrally on the back of the machine. It is absolutely as normal so the only problems will be to do with the shape and layout of the back of the +2 (see compatibility).

On the left-hand side of the machine is a proper reset switch, ie, it doesn't stab your finger when you use it and, behold, twin joystick ports bearing the curious warning 'Use only Sinclair SJS1 joysticks'. You won't be surprised to hear that Amstrad is marketing the said joystick. Unfortunately, that warning means what it says — your existing joysticks will not work on the new machine because whilst the connection is the standard Atari-style D-shaped plug, the pins are wired up differently from normal. So for the moment you are stuck with Amstrad's SJS1 joystick which has an expected retail price of £14.95 and doesn't look all that substantial — although to be fair I haven't tested it to destruction.

Expect better, cheaper +2 compatible joysticks within a month or two of the machine's release from other companies.

Another slight blow is that from the program end of things, the configuration of the new joysticks is Interface 2 standard not Kempston. Games therefore need Interface 2 or 'define keys' options before you can use them with joysticks on the 128K+2.



Programming

Exactly the same as the Spectrum 128. You can switch between the 48K single-keyword entry mode or the extended 128K editor where commands are typed in letter by letter. Since the keyboard no longer contains the mass of commands assigned to each key, if you want to program in 48K mode you'll need the manual open in front of you at the same time to remember where everything is.

Clearly Amstrad intends everyone to start using 128K Basic and didn't want to mess up the look of the slick new keyboard.

Verdict

An excellent machine. Very attractively styled and for £149 you get effectively a Spectrum 128, plus tape drive, plus twin joystick ports.

On that simple equation alone it has to be terrific value. But more than that, somehow it 'feels' like a winner. I think the software houses will support it because I think it'll sell in huge numbers.

Those who bought the Spectrum 128 can take heart. If this machine is a success it means much, much more exciting and innovative software that really uses the greater memory.

If the machine does half as well as it deserves to, it means a longer future for everyone who has one edition or other — from rubber key to 128K — of Sir Clive's little miracle.

There isn't a machine on the market to match it on price and performance. Not from Atari. Not from Commodore. Not from anyone else — even Amstrad!

The 128K+2 is a new beginning ■

Package deals

Amstrad is keen to stress that it is not they who are organising package deals but the chain stores themselves. Nevertheless, the following is a package option some shops will be stocking: Sinclair Spectrum 128K+2 with joystick and six-pack of software, all for £159.

The software pack is being assembled by Amstrad and consists of the following titles: **Crazy Golf**, **Punchy**, **Disco Dan**, **Alien Destroyer**, **Treasure Island** and **Oh Mummy**. Major titles they are not.

Got a problem? Then send for help! Write now to: **HEWSON**

How to interrupt and read your joystick

If you are writing a game you'll be able to read the joystick position. Andrew Hewson helps out.

A couple of people have asked about joysticks. The first is John Parkinson of Doncaster who asks: **Can the** Maze Game **be adapted to run with the joystick instead of cursor keys? I have bought a joystick which, according to the instructions, is port mapped to 31 and can be read by a Basic instruction like *"Print in 31: Go To 10"*. I have looked in the game listing for a line which reads the cursor keys like *"If Inkey$ = "5" Then . . ."* but I can't find one.**

Sorry John, I'm not familiar with the game you mention and your letter doesn't give enough details for me to track it down. The joystick you have bought uses the so-called 'Kempston' convention in which the software must read the status of the input/output port at Address 31 to find out if and when the joystick is moved, or the fire button is pressed.

I suspect the reason that you cannot find a line in the program which reads the state of the cursor keys using an *Inkey$* command is that the program uses a machine-code routine to do the job. The *Inkey$* command is relatively slow to execute. Your program probably uses a mixture of Basic and machine code — Basic to set up the game and string the bits and pieces together, and machine code for the parts which have to execute quickly.

The second joystick question is from Graham Nash of Coventry. He writes: **I'm having difficulty writing a machine-code routine to read from my Kempston joystick using an interrupt routine. How is it done?**

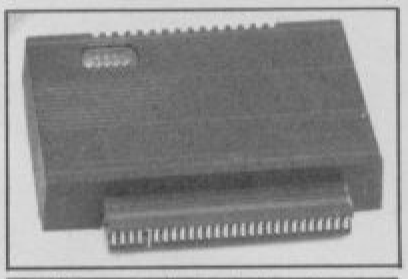
The Kempston joystick interface works like this. The *In* machine code instructors trigger an input/output flag which acts like a nudge to the joystick interface. The *In* instruction also puts an address on the address lines. For example, *In a,*31 puts the value 31 on the lines. The interface, having been nudged into activity, takes a look at the address and if it is the value required it starts doing its main job.

In the case of the Kempston interface the trigger address is 31 and its main job is to plonk a number on the data lines corresponding to the current state of the joystick. The number is one for right, two for left, four for down etc. The microprocessor then picks up the number from the data lines and tucks it away in the accumulator (the 'a' register). So all you need to do to read from a Kempston style joystick interface is to use an *In a,*31 instruction in machine code, or an *In* 31 instruction in Basic.

The fun and games start when you try to do the same thing from an interrupt routine. Normally the Z80



Kempston standard joystick



Kempston joystick interface

microprocessor at the heart of the Spectrum executes each machine-code instruction in strict sequence. There is however, a mechanism, called the interrupt system, which allows it to be distracted from its current task.

Here's an example of how it works. Imagine that you need to clean and tidy your house or flat. First you have to do the washing up, then make your bed, then dust the living room, then take the vacuum cleaner to the stairs and then wash the windows. You have all these jobs planned out and start to work through them, one by one.

You get stuck in and then, unexpectedly, the doorbell rings. You've interrupted. You put down what you were doing and go to answer the door.

You open the door and discover that it is the postman with a parcel for your neighbour. You put the parcel on the table in the hall.

Then you go back to what you were doing before.

So there we have it. A Z80 interrupt is a bit like someone ringing your front doorbell. When an interrupt occurs the processor has to stop what it's doing, go and "service" the interrupt and when it has finished, it goes back to its previous task.

There are three Z80 interrupt modes. Mode 0 is not particularly interesting. Mode 1 is the "normal" Spectrum mode. When an interrupt occurs the processor jumps to the routine at address 56 (decimal) near the bottom of Rom. The software at this address reads the keyboard and does one or two other jobs. The Spectrum hardware triggers an interrupt every fiftieth of a second and so the keyboard is read 50 times per second. More often than not nothing has changed in the time interval, but doing the key-scan this often ensures that the response appears to be instantaneous.

In Mode 2 the Spectrum jumps to a routine somewhere in memory. The address in memory is determined partly by the contents of the '1' register and partly by the value currently on the data lines.

There is a clear advantage in using an interrupt routine to read the joystick status because of the seemingly instantaneous response. There is no provision in the Rom routine at address

Discover the tools of the programmer

Now a word from overseas. Christos Panaou of Nicosia in Cyprus wants a few definitions. **What is a utility, an editor, a monitor, an assembler, a diassembler and a compiler?**

I've covered some of these items before but there's no harm in repeating them because Christos is by no means the only correspondent who gets the things confused.

Utility is a general purpose name for any piece of software which is useful to people writing computer programs. Thus the word covers all the items on your list, Christos, and a few more besides.

Most people who are new to computer programming do not realise how important software utilities. are to programming. Programs written in a professional environment are not so much individual achievements complete in themselves, but developments built on the programming work that has gone before

The word editor is applied to a whole class of programs which perform broadly similar functions in a wide variety of applications. Probably the best idea is to describe a few examples of editors so that the common facilities become evident.

By far the most common editor used on micros is not normally referred to as an editor at all, even though there is no doubt that it should be. It is an editor which is used to create text and I am using one to write this column. I refer, of course, to a word processor. Most of you will know that a word processor is used to write words, delete them, copy them from place to place, rearrange them and save them on disc or tape to be accessed later. This is typical of the range of activities of an editor program.

Another example which will be familiar to Sinclair users is the Basic line editor incorporated into the Sinclair Rom. In this case the program does not exist as an entity separate from the other routines within the Rom. Nonetheless, it is possible to think of its as a self-contained group of routines. This editor can be used to write Basic lines, delete them, copy them from place to place, rearrange them or save them on disc or tape.

A third, less familiar example, is to be drawn from the variety of graphics editors now on the market. These can be used to create graphic images of varying size and complexity, to delete them, copy them from place to place, rearrange them, and so on.

At the fundamental level each of these types of editor are used to manipulate computer memory and to interpret the contents of memory in a manner appropriate to the

N'S HELPLINE



Graham Close, Blewbury, Oxfordshire

56 to read a joystick port, therefore interrupt Mode 2 must be used. The problem is that the Kempston interface puts a value on the data lines corresponding to the current state of the joystick, and the Z80 also uses the value on the data lines to determine where in memory to jump to.

The solution is to set up all possible destination addresses to point to a single 'Kempston interrupt routine'. The routines listed in Table 1 do all the bits and pieces of the job and operate as follows. The first piece of code, at Address 32768, sets up a vector table which directs the Z80, when an interrupt occurs, to the main routine at Address 32896 no matter what the value currently given by the Kempston interface. This piece of code also switches the Z80 into interrupt Mode 2 using an *im* 2 instruction.

The next piece of code, at Address 232790, can be used to switch the Z80 back to ordinary working in interrupt Mode 1.

The main routine, at Address 32896, stores the current state of all the registers so that whatever routine has been interrupted, it can pick up the threads of what it was doing when it recommences. It then reads the Kempston interface using *In a*,31 and puts the value returned into the first give bytes of the printer buffer. A bit of decoding software sets the value of each of the five bytes to zero or one depending on whether left, right, up, down or fire are currently set.

Table 1 Kempston joystick read routine

Decimal	Hex	Assembler	Notes
		org 32768	Start at 32768
243	F3	di	Disable interrupts
33,0,129	21 00 81	ld, hl,33024	Fill vector
17,1,129	11 01 81	ld de,33025	table with 128
1,1,1	01 01 01	ld bc,257	
54,128	36 80	ld (hl),128	
237,176	ED BO	ldir	
62,129	3E 81	ld a,129	Set up interrupts
237,71	ED 47	ld i,a	to address 32896
237,94	ED 5E	im 2	
251	FB	ei	Re-enable interrupts
201	C9	ret	Return to BASIC
243	F3	di	
62,63	3E 3F	ld a,63	Restart normal
237,71	ED 47	ld i,a	interrupts
237,86	ED 56	im 1	
251	FB	ei	
201	C9	ret	Return to BASIC
255	FF	rst 56	Normal interrupt
299	E5	push hl	Store registers
197	C5	push bc	
245	F5	push af	
175	AF	xor a	Read joysticks
219,31	DB 1F	in a,(31)	
33,0,91	21 00 5B	ld hl,23296	Data to printer buffer
6,5	06 05	ld b,5	5 bytes of data
		Loop	
54,0	36 00	ld (hl),0	Clear byte of data
31	1F	rra	Move bit into data
203,22	CB 16	rl (hl)	byte
35	23	inc hl	Next byte
16,248	10 F8	djnz Loop	Loop
241	F1	pop af	Restore registers
193	C1	pop bc	
225	E1	pop hl	
201	C9	ret	Return from interrupt
		org 32896	
195,31,128	C3 1F 80	jp 32799	Jump to start of routine

To use the routine, enter the code as above, and *Randomize Usr* 32768. This turns the routine on. To turn it off, use *Randomize Usr* 32790 (or some other *Usr* line such as *Let zz=Usr* 32790).

While the routine is on, the position of the joystick is stored in the first five bytes of the printer buffer (23296 to 23300). Each byte can either be 1 or 0. If it is 1, then the joystick is in the position corresponding to that byte.

The first byte corresponds to joystick left, the second to right, third down, fourth up, and the fifth corresponds to fire. Combinations of these make up the diagonal and fire with movement controls

Feet don't fail me now

After comments on my head and my feet it sems that my eyes must now come under scrutiny.

John Fryc of Mansfield kindly sent two copies of his letter with the remark that he was sending the second one "just in case you are a bit blind and can't read the first". Hmmm! I wasn't aware of any such problems but maybe the lump on my forehead is from bumping into lamp-posts and not a sign of great intelligence as I fondly imagine.

Anyway you made me laugh John so I'm sending a cross-eyed copy of **Pyracurse** to you. But just to get my own back I'm not answering your query in the column!

application words. Basic lines or graphic images. Thus editors are software devices for the manipulation of memory according to the rules and regulations governing a particular application.

A monitor is a program which keeps an eye on, or monitors, the execution of another program. Suppose you had a program which was full of *Gosubs* and *Gotos* and the program kept on going wrong. It would be useful to have a second program which ran at the same time as the original problem program and printed the number of the Basic line currently being executed at the top left corner of the screen. This is the sort of thing that a monitor program does and very useful it can be whey you're fighting to debug your latest software creation.

An assembler is a very flexible, if laborious, program for directly creating machine-code routines. A machine-code routine consists of a sequence of instructions which the Z80 understands directly without any need for prior interpretation. The simpler instructions are held in one byte of memory, though the more complicated instructions can occupy as many as four bytes. Generally the instructions are executed in the order in which they are encountered although there are exceptions.

The decimal or hexadecimal codes for all the 600 or so instructions in the Z80 instruction set are difficult to remember and so, for this and other reasons, machine-code programs are almost always written using an assembler. An assembler converts instructions like *Add a,b* to the correct code. *Add a,b* directs the microprocessor to add the contents of the 'A' register to the contents of the 'B' register and the leave the result in the 'A' register. An assembler also allows the programmer to name variables, add comments and give labels to various points on the program allowing you to call sub-routines using the labels. A good assembler will have other facilities as well, all aimed at making your job as straightforward as possible.

A disassembler performs the opposite function to an assembler — it converts a sequence of numbers into a sequence of mnemonics which are easier to understand than the original code. A list of the more important mnemonics is given in the original Sinclair manual in Appendix A. A disassembler is of use when analysing code written by somebody else to find out how it works.

The output from an assembler is a program which the microprocessor can understand directly because it consists of machine-code instructions. In contrast, a program written using an interpreter, such as Sinclair Basic, is held in Ram in more or less the form in which it was entered by the programmer. Interpreters are high-level languages which bear little or no relationship to the instruction set of the processor on which they are run. However, every time the program is executed each line must be analysed by the processor before the required action can be taken. The principal disadvantage of this system is that the programs can be slow to execute because the processor spends most of its time working out what each program lines means.

A compiler gets around this problem by analysing each program line only once, and then storing a sequence of machine-code instructions which are equivalent to the original program. Thus, the speed of machine-code is obtained without losing the convenience of a high-level language. The machine code produced by a compiler can be tortuous and so, when efficiency is essential, an assembler is better.



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COIN-OP CLONES

ARCADE REVIEW



Clare Edgeley looks at how the classic cop-ops have been converted in Part 2 of our arcade round-up

Coin-op conversions have the industry by the throat. Everybody's doing it. Last month we had a look at conversions which will be appearing in the run up to Christmas, and this month we've decided to look back to the games which started the epidemic — what game appeared in what guise and who was responsible? Come to that — was it worth it in the first place?

Software charts in recent months have been dominated by games either directly licensed from coin-ops or by games which consciously use elements from an arcade hit.

And it's a fashion industry. Looking back we've had waves of first Kung-Fu games, then **Commando/Rambo** games, **Marble Madness** spin-offs and finally **Gauntlet** look-alikes.

Twenty or so hit titles all based around four basic game formats.

THE KICK OUT OF MARTIAL ARTS

Like the computer industry, if one coin-op game is successful a multitude follow. **Karate Champ, Kung-Fu Master** and **Yie Ar Kung Fu** followed close on each other's footsteps — all fast, very playable and all with very similar story lines.

Melbourne House started the micro kicking epidemic with **Exploding Fist** — a classic Kung-Fu type game in which you have a number of different kicks and punches at your disposal to fight your way through to tenth Dan. In fact, **Fist** did so well **Fist II** will shortly be here. Similar in style it will be larger and feature new moves, and opponents.

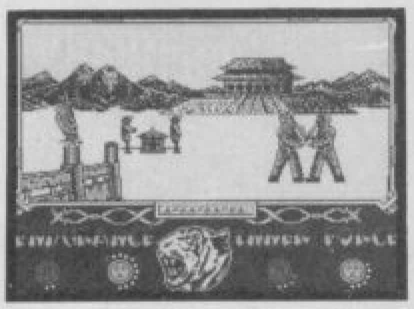
Then came **International Karate** from System 3 — martial arts in globe-trotting style with some marvellous international backdrops to complement the fighting sequences. Back to the Romans with Domark's **Gladiator**. Again, a derivation from the martial arts simulations with 25 joystick movements and a choice of 45 weapons. Quite confusing at first.

The games above only borrowed fighting themes from the coin-ops, but Imagine's **Yie Ar Kung Fu** was officially licensed from Konami's machine and is an excellent conversion. A wide variety of moves, but it's too easy.

You'd have thought that by this time we'd have reached saturation point but no. Mirrorsoft's **Sai Combat** was next, in fact very good and for once has only one combat weapon, the sai — long poles to you and me. **Way of the Tiger** from Gremlin Graphics takes you back to the land of the rising sun, It's a big game with lots going on, impressive graphics and action sequences.

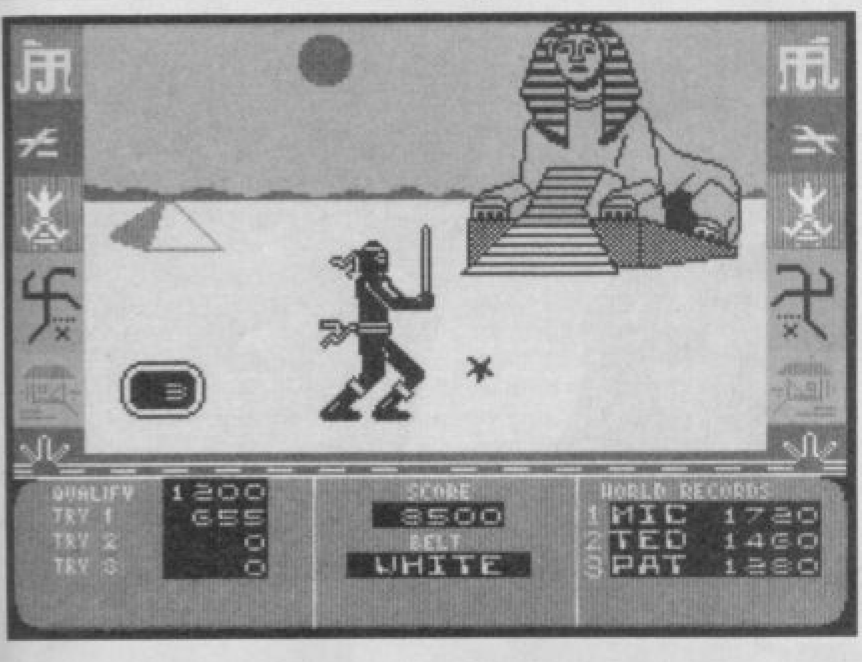
As if that wasn't enough, there's now US Gold's **Kung Fu Master** — reviewed last month — licensed from the Data East coin-op of the same name. Not so good as its micro predecessors. A pity, the coin-op version wasn't that bad.





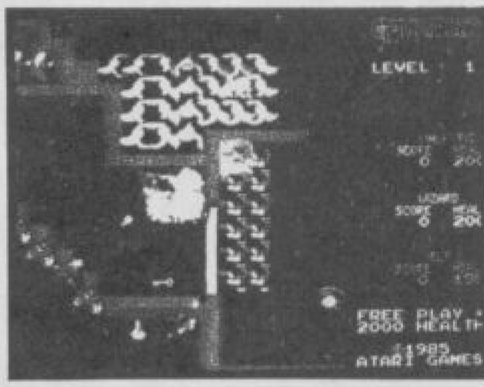


▲ Top: Sai Combat-one of the best
▲ Lower: Way of the Tiger — scrolling vistas and variety
◄ Kung Fu Master, the deadly red squiggly thing attacks
▼ Ninja Master reflects a minimalist approach



GAUNTLET MAKES THE GRADE

But by far the most recent epidemic has only just begun and it looks like a biggie. The game's **Gauntlet** and though US Gold's got the licence to do an official conversion, due out in November, at least two lookalikes will be out long before.

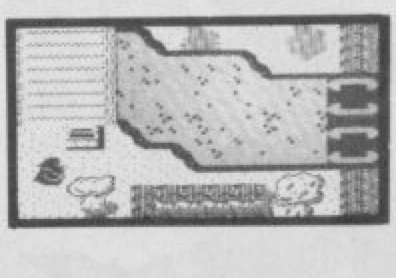


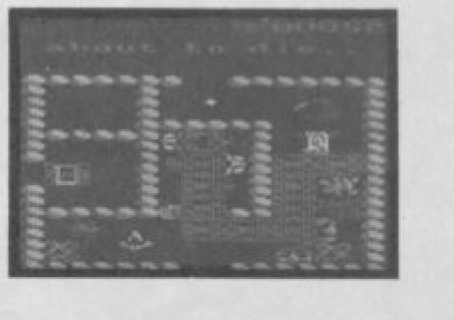
▲ **Gauntlet — the coin-op real thing**

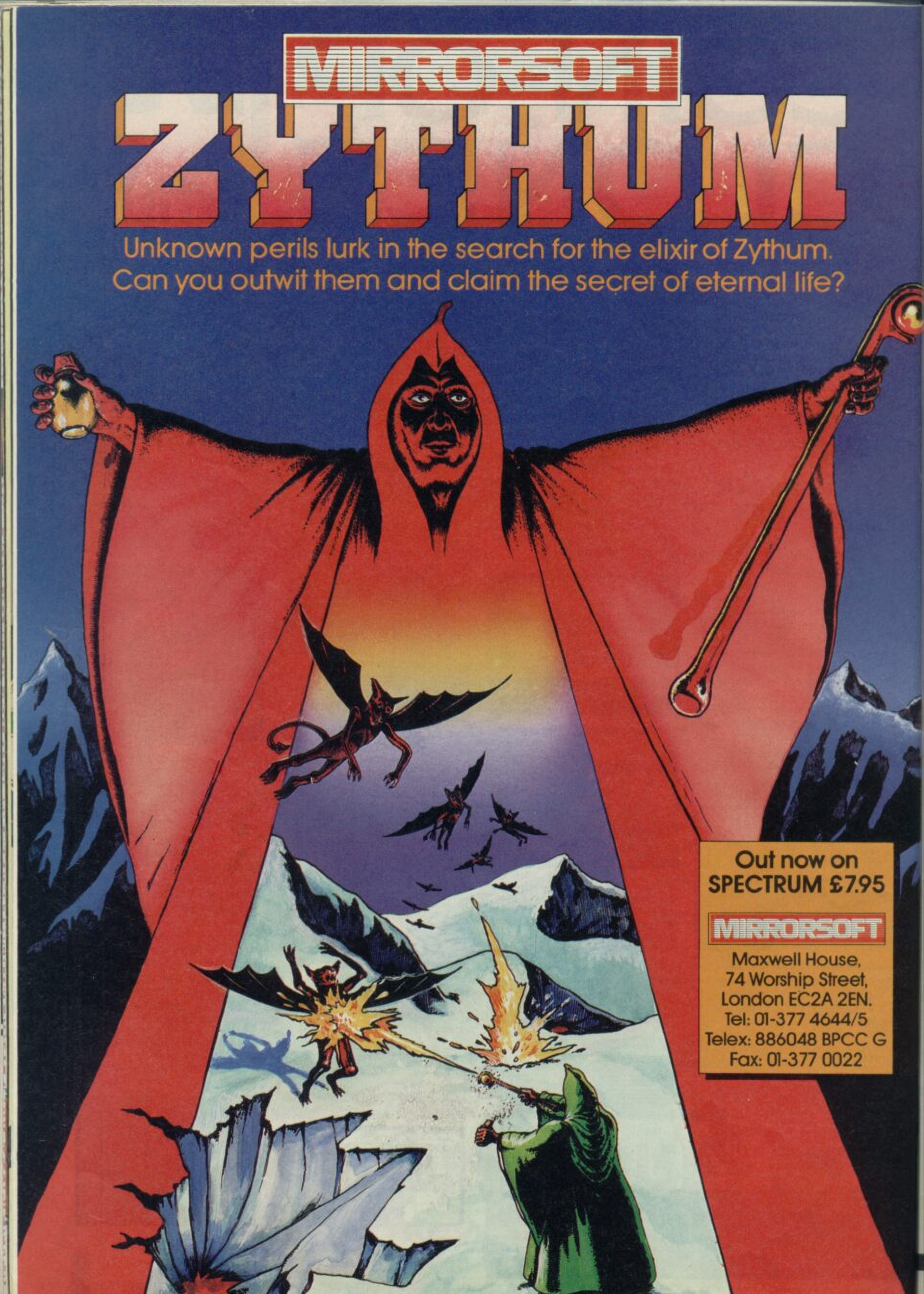
But on the streets already is **Storm** - a £1.99 special from Mastertronic, based on the Gauntlet theme. Movement is a trifle sluggish by play. Play is much the same though, with you battling round a maze (split in sections) shooting maraudering baddies and picking up energy, food, magic etc.

Firebird's **Druids** is much more **Gauntlet.** In fact, the maze even scrolls in the same manner as the original and the characters are almost identical — that is except for Golum — a furry slave of sorts.

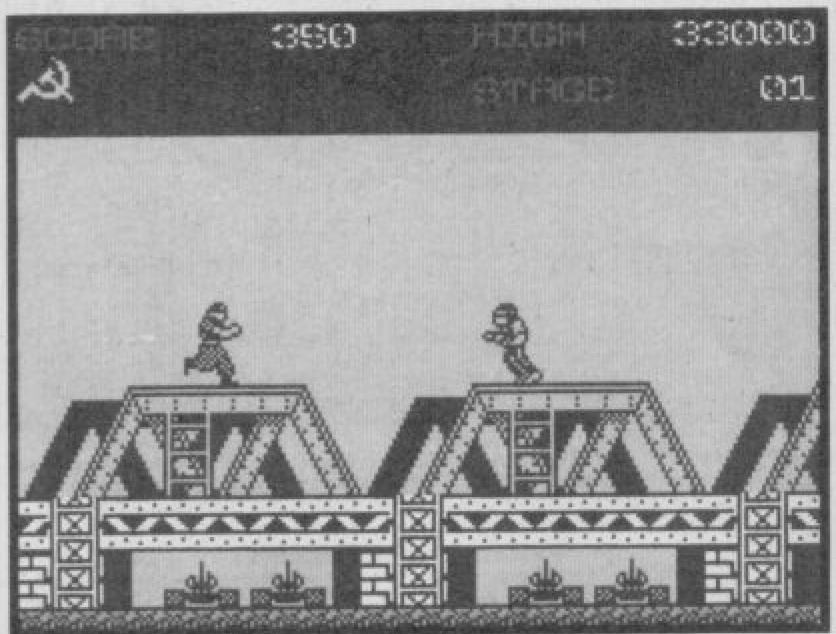
▼ Left: Druids — what official version? Not the real thing.
▼ Right: Storm, sorcery on a budget






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ARCADE REVIEW



▲ Green Beret — authentic touches
► Sprites attack in Commando
▼ Below: Rambo v communists in dufflecoats



RAMBO RUNNING WILD



With martial arts out of their systems — well almost — software houses cottoned on to the huge success of the one-man-against-an-army-of-rebel-reactionary-whatever coin-ops like **Commando** and **Green Beret**.

Only this time there was a difference. Licensing deals were suddenly hip.

Elite was first to the mark by getting the rights to **Commando** from Capcom. And a creditable and very successful — from Elite's point of view — conversion it was too. Though it's unfair to compare the Spectrum graphics with those from the coin-op — a coin-op's circuit board contains lots of preprogrammed Eproms, meaning much superior graphics — Elite has managed to duplicate many scenes from the game. Even the flickery and rather basic sprites don't seem to matter because the spirit of the original has been maintained.

Just as **Commando** spawned similar coin-ops in the arcades — **Storm Trooper** *et al* — so did **Commando** the computer game.

I didn't think Ocean's **Rambo** would be as popular — sparse on graphics but very tricky. However, it made the mark and has proved a real challenge. Imagine's **Green Beret** is marvellous and, in my opinion, beats the pants off the others. Licensed from Konami's fabulous coin-op of the same name, Imagine has somehow managed to capture the spirit, graphics and playability of the original.

Alligata's **Who Dares Wins II** is a different kettle of fish altogether. Similar to Elite's **Commando** it's not even half decent and boasts some wonderful attribute problems and colour clash.

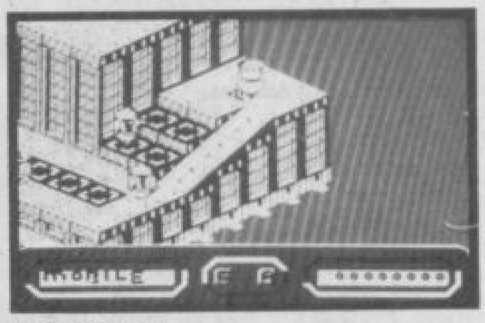
And lastly, and soon to hit the streets is a new conversion from Elite — **Ikari Warriors** from the SNK coin-op featuring the Rambo twins. Lots of room for suicidal heroics, fast and fun. Just think, you'll soon have these macho heroes running rampant across your screens.

MARBLE MADNESS

On to rolling balls and spinning tops — **Marble Madness** has us in its grips. Atari's celebrated coin-op, which has just been licensed by Ariolasoft has been well and truly imitated. Unfortunately, Ariolasoft has no plans for a Spectrum conversion.

Melbourne House, was really on the ball with **Gyroscope**, probably the closest visually to **Marble Madness**. An instant hit too, with the gyroscope spinning down a 3D landscape of gridded ramps, treacherous paths and cliff-hugging corners. A very respectable version even though Melbourne House maintains that **Gyroscope** is not based on **Marble Madness**.

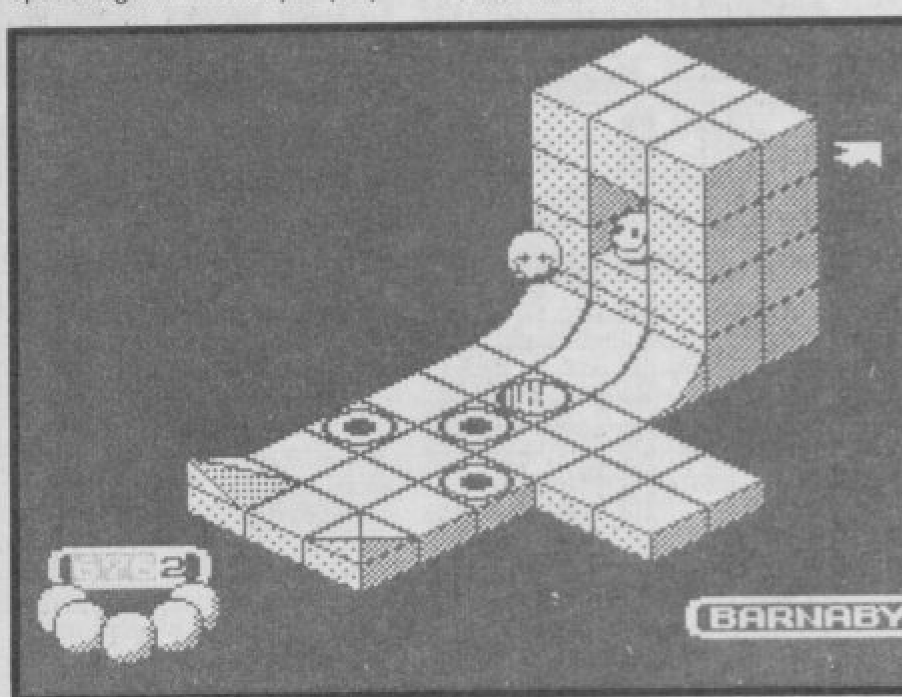
And now for Hewson's bid. The link between **Quazatron** and **Marble Madness** is the landscape — once again ramps, slopes, narrow pathways, all calling for great control when moving around. The game itself is very different, and you've got to deal with a bunch of alien droids spread over seven levels, connected by lift shafts. They shoot at you, you shoot back. Electric Dream's **Spindizzy** uses the **Madness** theme, but has split the game so that you play



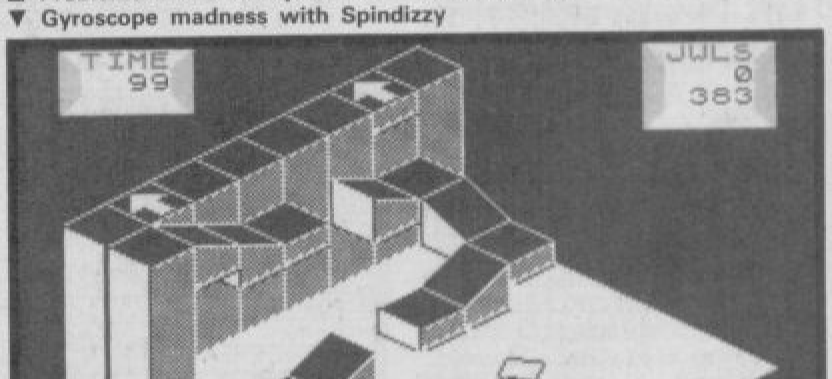
▲ Quazatron

it in sections, making it look quite different. Still, the ramps, slopes and the rest are all there. Puzzles have been added, traps to negotiate, slippery surfaces, squares to be touched in a certain order before access is granted.

And **Bobby Bearing** from the Edge. Distinguished by its superb graphics, a nifty piece of programming and some really tricky puzzles. Hazardous and very neatly programmed coded best of the bunch ■



▲ Problems in curved space with BobbyBearing
▼ Gyroscope madness with Spindizzy



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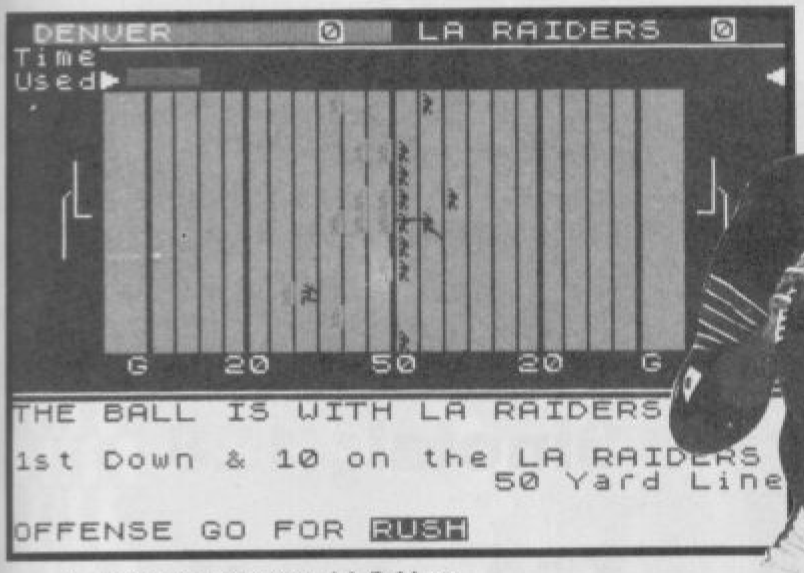
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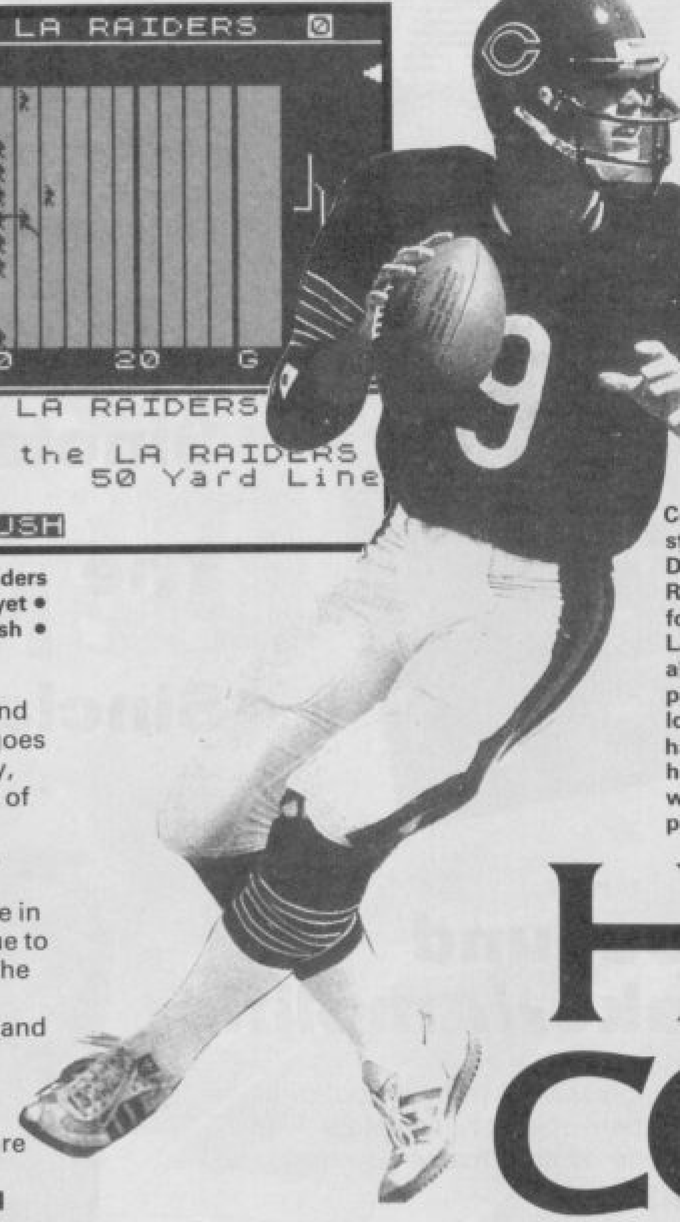
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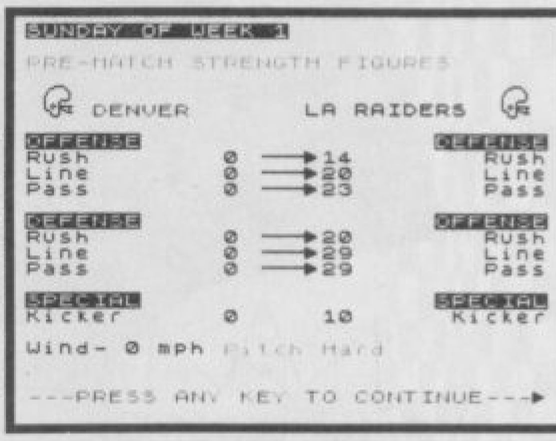
STRATEGY SIMULATION REVIEW

HEAD COACH



▲ **Match in progress • LA Raiders (right) have the ball • No score yet • LA Raiders are going for a Rush • Denver are on the defensive**





Comparative strengths of the Denver and LA Raiders teams before the match ● LA Raiders are ahead in every department and look like winning hand down ● A hard pitch and no wind will favour a passing game ▶

If 'The Fridge' brings to mind a 20 stone colossus who goes by the name William Perry, then you are likely to be part of a fast growing band of American Football fans. The popularity of this game has grown enormously over here in the last few years, mainly due to its coverage on Channel 4. The sport now has its own magazine, a league of clubs and an increasing number of players and supporters.

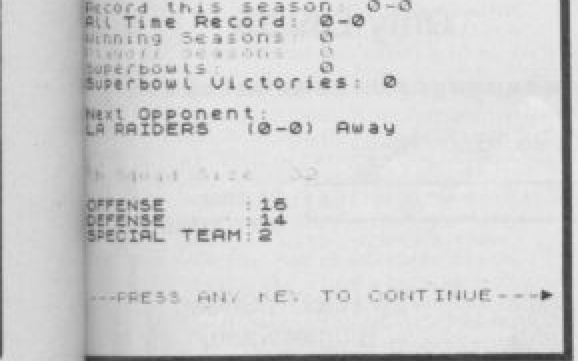
Addictive Games, the Bournemouth-based software house responsible for the immensely popular **Football Manager**, has turned its attention to American Football. The result is a game every bit as gripping as its predecessor.

Head Coach, by SJC Davies, follows the same format as **Football Manager**. You are the manager of an American Football club in one of six regional divisions. Your aim is to steer your club to the regional championships, thus qualifying for the Super Bowl play-offs.

There are four skill levels: novice, rookie, veteran and all-pro. Beginners are well advised to start with novice.

Having chosen your club, such as the New York Giants or Dallas, you then pick your team from a squad of 30-odd players. Don't be put off if you know nothing about the game, the positions and the tactics soon become clear. Running backs, tight ends, quarter backs and kickers are different from goalkeepers, wingers and strikers, but similar principles apply.

Team statistics ● Denver has a squad of 32 players to choose from ● Your record as a winning (or losing) coach is compiled from week to week ▼



You have to select both an offensive and defensive team, taking into account the form, fitness and ability of the various players. If you select an illegal line-up, such as two quarter backs, the program will point out your error and let you choose again.

Information about the opposing team is provided by scouts, but the accuracy of these reports varies during the 12 match season.

Once you've got your team, the match begins. This is shown on screen in a manner familiar to all **Football Manager** devotees. The two teams line up on the pitch, initial possession depending on home or away advantage. If you have possession, you can choose between passing the ball, going for a rush, attempting to gain short yardage or kicking for goal. If you are defending, you choose the tactic which you think the other side will take, or adopt a general defensive posture.

Passing the ball offers the greatest hope of scoring a touchdown, or gaining a substantial amount of yardage, but it also has the greatest chance of losing possession. The unexpected tactic can also be extremely successful, such as deciding to go for a rush when the opposition is set up for a pass.

An expert kicker is vital, though you need to be reasonably close to your opponent's goal in order to be successful. It is a tremendous thrill to kick a goal with the last play of the match when you are nine to seven down. It is surprising just how much adrenalin you can generate while guiding your team to victory — or defeat.

After each game you can strengthen your squad on the transfer market. Other clubs may offer players in return for a member of your team. They're not stupid, though, and any attempt to trade a no-hoper for a star is almost certain to be rejected.

At the end of the season, the divisional winners and a small number of wild card teams will be invited to the Super Bowl play offs. This is organised on a knock-out basis, the winners being accorded the accolade of Super Bowl champions.

After the Super Bowl, you get up-dated information about your playing squad. Some of the older players will retire and some of the younger players will improve their performance. Then, you will be offered the chance to fill some of the gaps from the college draft — a new intake of players from the college system — before embarking on your second season in the game.

Head Coach is a must for everyone who enjoyed **Football Manager**. It should also appeal to all American Football fans.

For those who know nothing about American Football, **Head Coach** provides an excellent introduction to the game and how it works. Go for it ■

FACTS BOX

A must for all sports fans. If you thrilled to Football Manager, this one is unquestionably for you

HEAD COACH

Label: Addictive Games
Author: SJC Davies
Price: £8.95
Memory: 48/128K

Reviewer: Brendan Gore

★★★★★



SPECTRUM 48K
NIGHTMARE RALLY
DEMON-1
WAKELIN
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DESIGN

TAKING... ...TIGER MOUNTAIN

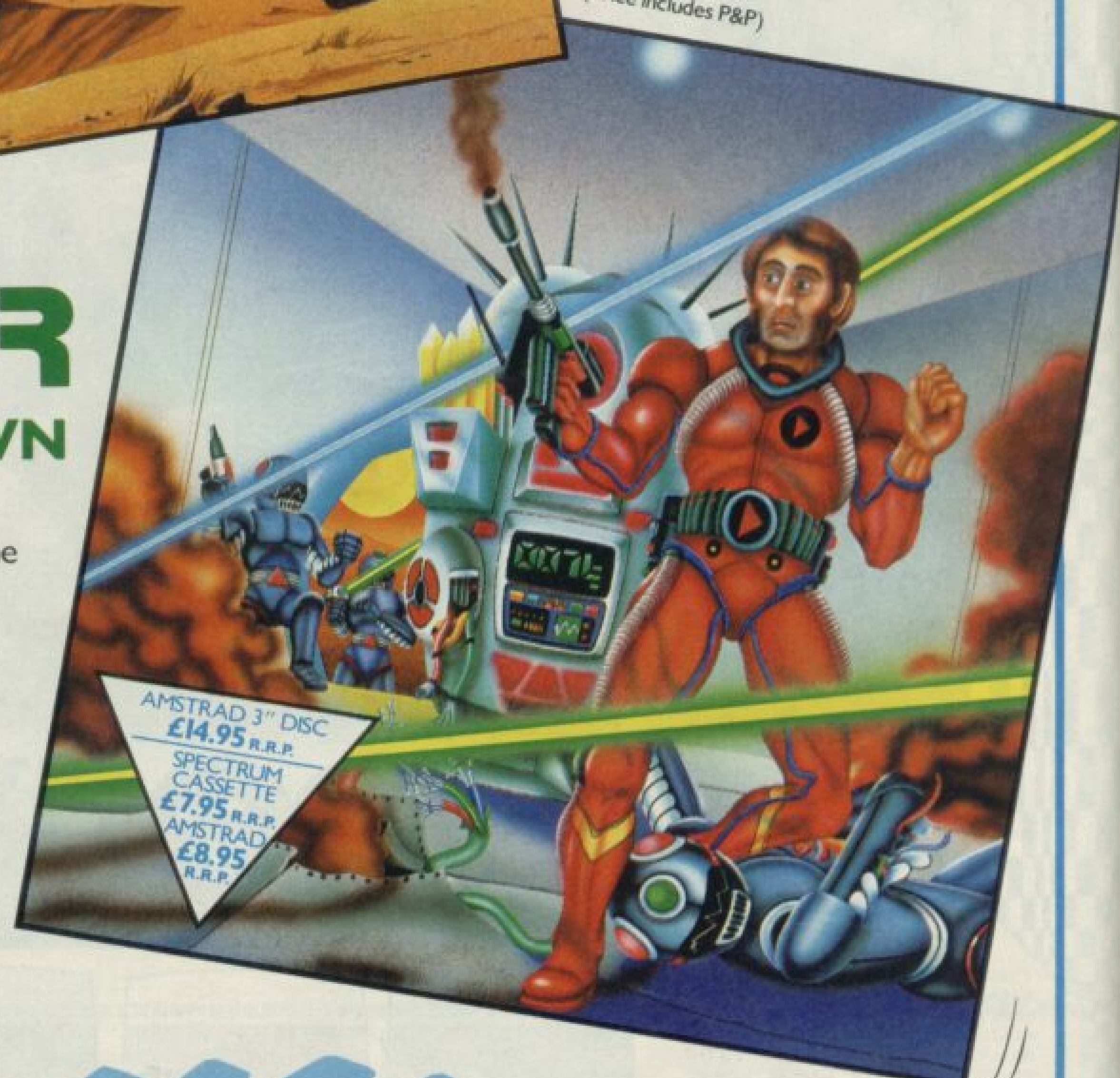


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ARCADE REVIEW

PLAYING TIPS

- The cross gives temporary immunity from attack
- Spring pools (wavey lines on screen) cause you to bounce uncontrollably — avoid them as this leaves you open to attack
- Marshy areas (tufts and thistles) restrict your ability to take off
- Save smart bombs and use them carefully. There are certain situations where you really need them
- Use periods of immunity to move quickly on. The time limit is tight

ZYTHUM

Take one wizard from **Avalon**, add some **BC Quest for Tyres** graphic design and ladle in a classic arcade plot (**Hunchback** if not much earlier) and you have **Zythum**.

Zythum is not by any means a bad game. In fact it uses some classic ideas rather well and looks quite good if two-colour. It passed the 'aaargggghhhh-why-did-I-do-that?' test with flying colours (uttered once an hour is bad, once a minute is good — with **Zythum** it was about once every twelve seconds).

The central figure is a wizard who favours the same dresses as the wizard in Avalon, a sort of southern Belle number. Forcing your central wizard to wear a dress means that you have to do less animation, a cheat but I guess he hovers quite well. Quest object this time is a magical drink which generates unknown powers (in this respect it is similar to Pratt's Old Peculiar) — the substance is stashed in a castle. Before you reach the castle you must cross four different lands each one chock-full of bottomless pits, marshes and quicksand.

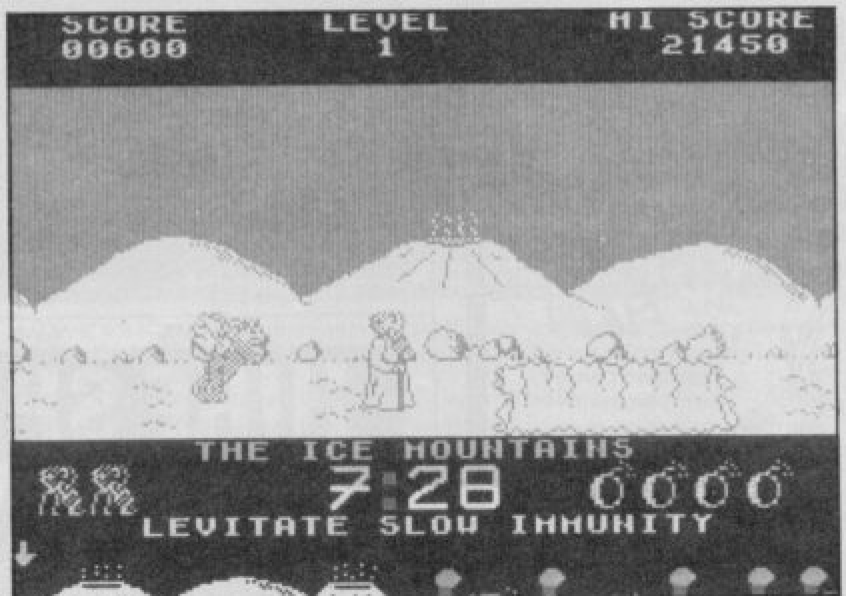
Guarding each land are the usual hoards of flying creatures (in the first land it looks like a Yorkshire terrier with wings). It should be pretty apparent from this that the game is going to involve a lot of dodging, jumping and zapping as you fight your way through each land.

The game looks pretty good, it features the kind of detailed, two-colour backgrounds associated with games like **Tir Na Nog** and the central figure is quite neatley animated. The two-colour limit is a surprise, though, I can't see the attribute clashes were so utterly unavoidable that the restriction was necessary and a bit more colour should have been possible.

Spells are available for levitation and temporary immunity from the dogs and subsequent flying things. You can also pick up spare smart bombs here and there and bonus points.

The playing are is large. Each of the four lands is displayed along the bottom of the screen with an arrow indicating what point you have reached. There are certain minimum points you must reach in each section before you don't have to restart at the beginning. I found this, quickly, getting very, very irritating.

What counts as hard or easy in computer games is so astoundingly subjective that I hesitate to put any such value on **Zythum**, but I reckon it definitely deserves a 'not for beginners' tag. ■



FACTS BOX

A good varient of a tried and tested format. Difficult challenges in this trad-style dodge-and-fire with a high frustration factor

Label: Mirrorsoft
Author: David O'Connor
Price: £7.95
Joystick: Kempston, cursor
Memory: 48/128K

Reviewer: Graham Taylor

★★★★☆

FAIRLIGHT 128

Magic has faded in the Land of Fairlight! The great kings lie in barrows under burnt fields and, as the cloud crowded night moves over the valleys, the people look forward to doom. **Fairlight** has returned, specially enhanced for the 128K machine.

No game has yet bettered the fabulous 3D graphics of the original **Fairlight** — also one of the few arcade adventures which treats every part of a room as separate: move tables, chair, pots and barrels, the only limit being your strength.

There are few differences between the 48K and 128K versions of **Fairlight.** The new version contains more locations, more monsters and a superb continuous music track.

Fairlight isn't just about fighting, feeding or picking up objects. Although you can use your sword to get out of most situations it is always better to use brains — and not so testing on your life energy level. For instance, you can battle the guard on the ramparts, kill him and move through the door he was protecting. Alternatively, you can entice him into the courtyard, dodge around him and make for the door — simple and not one life point lost.

Fairlight 128 is a fabulous game, full of mist and magic. It stands a helmet and full set of chainmail above other 3D strategy games and is likely to remain so for a long time to come ■

FACTS BOX

Fairlight always was a Classic game. Now its even better with full soundtrack and more locations.

FAIRLIGHT 128
Label: The Edge
Author: Bo Jangeborg
Memory: 128K
Price: £9.95

Reviewer: John Gilbert

★★★★★



SINCLAIR USER CLASSIC



JEWELS OF DARKNESS

ADVENTURE



REVIEW

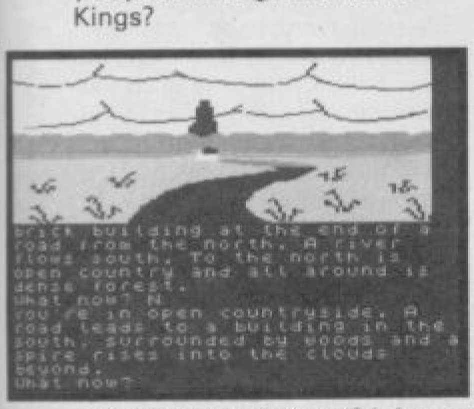
Jewels of Darkness is the collective title for a trilogy of Level 9 adventures — **Colossal Adventure, Adventure Quest** and **Dungeon Adventure**.

These are the three early titles which firest established Level 9 as a major force in the adventure world.

Packaged by Rainbird, these adventures have now been improved for their re-release. Colourful graphics, extended text descriptions and a host of new options, such as the resurrection of your character after it has been killed, have been added to the original games.

In **Colossal Adventure**, you score points for finding various treasures. Depositing these treasures in the small brick building near your starting position will increase your score still further. You lose points for being killed, something which is surprisingly easy to accomplish.

Having found your way underground, remembering that a lamp is useless unless it is lit, you are confronted by a number of perils. Will the Hall of Mists prove fatal or welcoming? What have you done to annoy the dwarf who keeps throwing axes at you? How can you persuade the green snake to let you pass through the Hall of Kings?



▲ A spire in the distance ● Is it your final destination? ● Beware axe-throwing dwarves

Well, I can't spoil the adventure for you by answering any of these questions — suffice it to say that the problems aren't too difficult.

The second part of the trilogy, **Adventure Quest**, is quite similar to the first. The main difference is that you are searching for the Demon Lord's Black Tower, where you hope to defeat the Demon Lord himself.

Again, you start off near a building by a road. Inside you will find an assortment of objects including a sling, a bottle, a bunch of keys and a table. Steps lead down a well in the centre of the room, but you will find it difficult to breathe underwater.

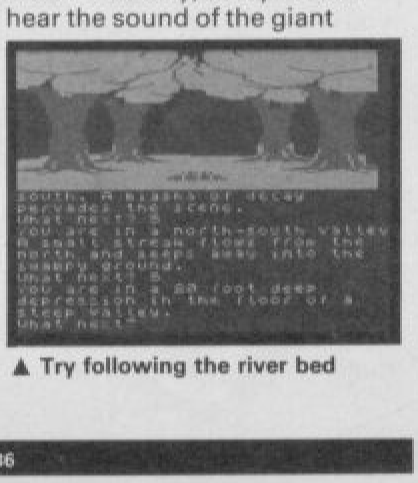
A little exploring will bring you face-to-horn with a unicorn. This beast is easily pacified, if you can stretch yourself enough to provide a flowery offering. This, in turn, opens up further avenues for exploration.

If you chance upon a stone pinnacle, you may also find a robed wizard bearing a scroll. This scroll contains much good advice about the whereabouts of the Talisman and the need for the four stones guarded by the servants of the demon. It also carries the dubious blessing of Typo, god of adventures.

Eventually, you find yourself crossing a trackless desert in pursuit of the Demon Lord. Listen carefully, and you will hear the sound of the giant worm before it emerges from the sand to swallow you whole. You could be forgiven for thinking you had suddenly found yourself on Frank Herbert's *Dune* — certainly someone at Level 9 is a an SF fan.



▲ Level 9's classic trilogy, re-released with colourful graphics, more text and a host of new options ● An excellent starter pack for beginning adventurers



▲ Try following the river bed

Orcs and giants abound. And this is the outside of the Black Tower, never mind the heavy stuff inside.

The third and final part of the trilogy, **Dungeon Adventure**, starts on a bridge leading to a gigantic stone orc's head. The bridge is in fact the orc's tongue and leads into its mouth.

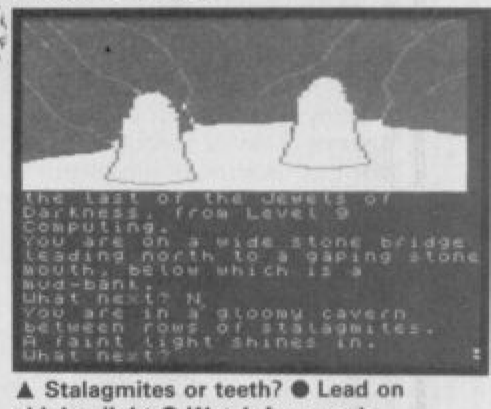
To score points, you must collect the treasures left behind by the late and unlamented Demon Lord and bring them to the store room. In this game it's possible to carry a lot of objects at once, thanks to a Tardis-like technique whereby some things are larger inside than they are outside.

The hazards come fast and furious in this game — perhaps you are suposed to have learnt something from the two previous adventures. Deadly sirens, bloodthirsty guards and evil smelling mud banks lie in wait to trap the unwary.

The science fiction element appears again in the form of the Rakasha — the demons which figured prominently in Roger Zelazny's *Lord of Light*. You are asked to take part in a dice game. If you win, the Rakasha will strengthen the flames of your soul, but if you lose the Rakasha will claim your body.

The trilogy has survived the test of time very well. Taken together the three titles make an excellent introduction to adventuring and, also, give a real insight into where it all began — with the legendary **Colossal Adventure**.

The colourful graphics are a welcome addition to the adventures. The locations are depicted in full colour and help to build up the atmosphere. The graphics are static, but no less effective for that.



▲ Stalagmites or teeth? ● Lead on shining light ● Watch for guards

Dyed in the wool text only fans will appreciate the option of loading Side 2 of the tape. This produces a non-graphic version of each adventure, with expanded text explanations.

All in all, these are still three of the best adventures going. Anyone who missed them first time round should certainly invest in the set now ■

FACTS BOX

Level 9's classic trilogy of traditional adventures. A must for every adventure collection

JEWELS OF DARKNESS
Label: Rainbird
Author: Level 9
Price: £14.95
Memory: 48/128K

Reviewer: Brendn Gore

★★★★★

VERA





Shades of Inspector Clouseau. This is a game for all 'Who dun it' fans.

In **L'Affaire Vera Cruz**, you take on the role of a newly appointed detective sergeant in Saint Etienne's regional crime squad. Your first case is to investigate the mysterious death of Vera Cruz, whose body was discovered by a caretaker in the Forez apartment block. Was it suicide — or murder?

Proceeding in an orderly fashion, you arrive at the scene of the crime. A high res picture displays the murder scene. You are not allowed to touch the body or its surroundings, but you are allowed to photograph them for clues, searching the picture with a magnifying window which might highlight important details. It is easy to rush through this section of the game, in an attempt to get on with solving the crime, but painstaking efforts now pay dividends later on. Some of the evidence is certainly worth looking at more than once.

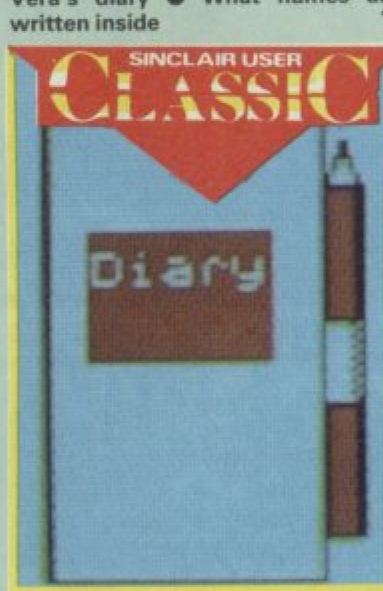
Having completed your preliminary enquiries, you make a list of all the evidence you have discovered. Then it is time to do battle with the real enemy of the piece, the French police computer system. Buried away in its multifarious files is the information you will need to solve the case — if you can find it.

The nerve centre of the system is the research co-ordination centre at Lyon. This gives criminal records of suspects, some addresses and photographs, information about vehicle registration and ownership and other interesting snippets.

The Saint Etienne police squad is linked directly to Lyon, as are other police squads throughout France. But, not all relevant information is passed to Lyon, so you may have to contact other police squads.

The prison service is also linked to the system and contains important facts about prisoners and ex-prisoners. Unfortunately, most of these facts are kept at individual prisons, so they will have to be approached separately, providing, of course, you know which prison to approach.

▲ Who dun it? ● A dead body, a pistol and blood on the floor ● Plenty of clues, but few answers Vera's diary ● What names are written inside ▼



▼ Vera Cruz ● What did she know that was worth killing her for?



So you delve into the system and begin to build up your case. This involves taking statements from suspects, comparing the evidence and conducting examinations such as autopsies. Sounds simple doesn't it? It isn't.

The key to the game is knowing what questions to ask and who to put them to. To take a statement, though, you must be able to provide both a name and an address or location. If you want to trace a car, you will need the full registration. None of these facts are provided for free.

This is where **Vera Cruz** is so different from games like **Cluedo**. You are not given a list of suspects, Colonel Mustard, Miss Scarlet, etc, nor a list of possible murder weapons. You must form your own list of suspects, decide upon their motives and whether or not they are lying, and draw your own conclusions. The failure to ask a particular question, of the right source, could mean that you fail to uncover a whole number of important suspects.

Just as important is the element of uncertainty. You may have uncovered all the relevant information and potential suspects, but you have no way of knowing whether you have missed something vital or not. As in a real-life investigation, you will be operating in a state of uncertainty.

If in doubt, follow the police's example: go back to the beginning and re-examine all the evidence. Look for correlations which you may have missed and questions which remain unanswered. The printer option, which enables you to print out the evidence, is extremely helpful in keeping track of the investigation. But, don't forget that there may be advantages in returning to the original source.

Don't despair if you become completely stuck. Not even Sherlock Holmes solved every case. But, you might want to take a leaf out of Sherlock's book and acquire a Dr Watson. Get a friend to have a go at the game — a fresh viewpoint often brings surprising results.

Infogrames' **Vera Cruz**, written by Gilles Blancon and converted for the Spectrum by Malcolm Herd, is an intricate puzzle which will take many hours of playing time to solve. My only real gripe, other than the idiocies of the French police computer system, which probably reflect the real thing, concerns the instructions. They give almost no help — maybe that's part of the game.

Certainly, the instructions were deliberately written to provide just enough information to play the game without actually being 'helpful'. Personally, I think I need all the help I can get.

The graphics are simple and straightforward and provide a much-needed break from the mental task of working out who did what to whom. I particularly like the photographs which accompany the police files on certain suspects. If all else fails, you can always decide who the guilty party is by seeing whose eyebrows are too close together.

The game actually provides a real insight into the way police investigations are conducted. No *Miami Vice* heroics, no screaming car chases, no street

CRUZ

shoot outs, just lots of slow plodding hard work, taking statements and questioning witnesses to build up a picture of what really happened.

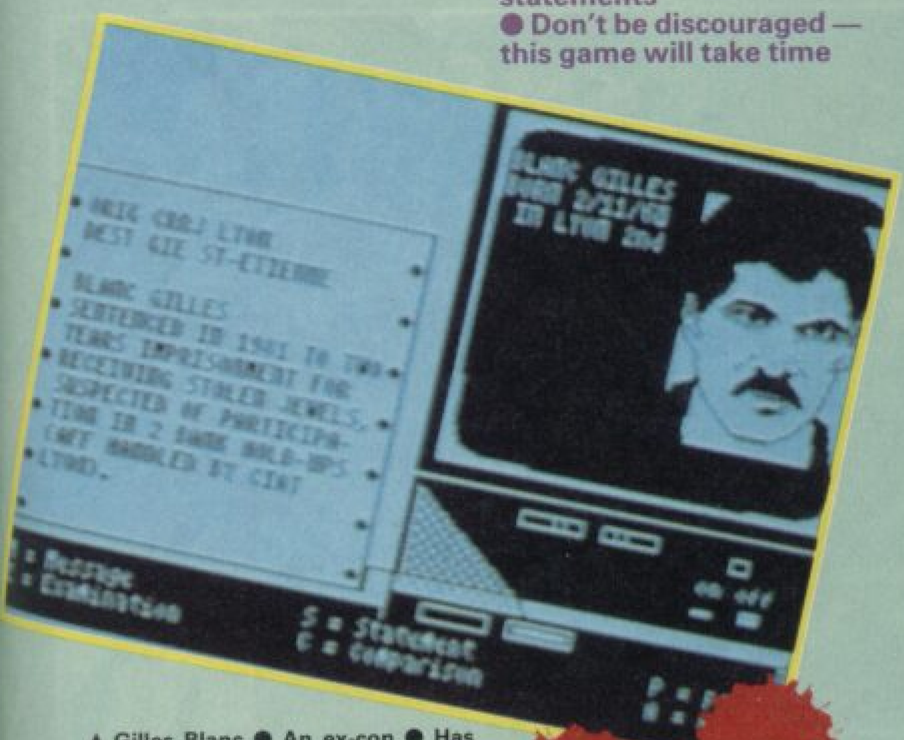
Where the game really scores is the way your fascination grows as you get deeper into the case. You are drawn into the investigation just as the much as any of the suspects you uncover. Spider-like, you are weaving a web which nets some surprising victims.



▲ Morroco bound ● Who is this man? ● What does he know?

What is the Morrocan connection? Is the French military really involved? Who did Vera write her last letter to? Did she even write the letter or is it a forgery? The answer to these and other questions will be revealed when you start playing the game . . . maybe.

So, do you fancy yourself as a



▲ Gilles Blanc ● An ex-con ● Has he reformed or is he the villain? ● What role did his brother play? ● How is he linked to Vera Cruz?

detective, are you an Agatha Christie fan, have you ever wanted to pit your wits against the great fictional detectives? **Vera Cruz** provides a stiff test for your powers of deduction and stamina.

As for who really did do it — I'm not telling. Whether I'm not telling because I didn't find out, or because I don't want to spoil the surprise, I will leave for you to deduce . . . ■

FACTS BOX

Very original and inventive game of deduction — has an authentic feel of real police work

VERA CRUZ
Label: Infogrames
Author: Gilles Blancon
Price: £8.95
Memory: 48/128K

Reviewer: Brendа Gore

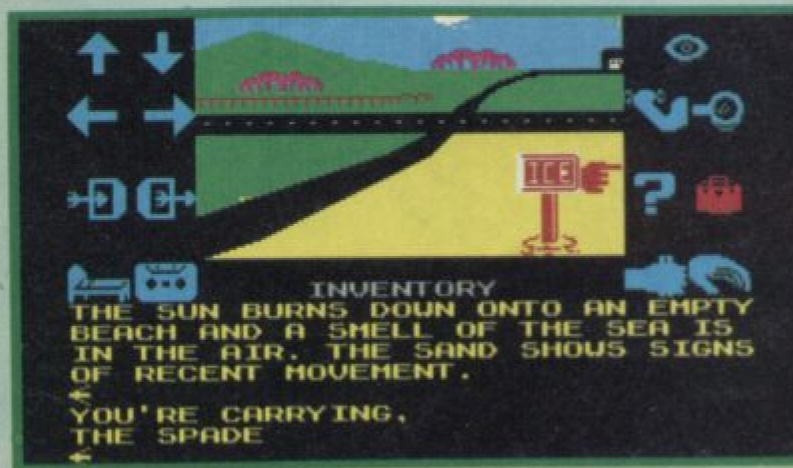
★★★★★

Playing Hints

- **Photograph everything — you can never be too careful**
- **List all the evidence**
- **Build up you own files on suspects, places, objects and look for connections**
- **Only arrest a suspect if you are sure of your case**
- **Don't forget to take statements**
- **Don't be discouraged — this game will take time**

ZZZZ

ADVENTURE REVIEW



Not bad at all. **Zzzz** is, in its own quiet way, an attempt to bring some original touches to adventure game design. Fundamentally, it's what one can only call a graphics adventure but some of the more tedious aspects of playing adventures have been replaced by an option to use single-key, icon-based commands. Standard options like *Enter, Save,* compass directions, *Get* etc, are represented by a variety of icons which may be highlighted using the joystick rather than typing the complete command.

The centre screen shows the current location, graphics are quite simple but not without some charm, around **Knight's Quest** quality (for those who can remember that far back) and drawn instantly.

As an adventure, **Zzzz** has some interesting ideas. The first is the original premise — that all the events happen in your dreams and only dream logic applies. Your quest is to metaphorically cross the dream border post and wake up, the alternative is to remain lost in dream land forever. James Joyce would have been proud. Another nice touch is the Sanman, a peculiar character who pops up in unlikely places and makes curious observations that may or may not count as actual clues.

The opening of the game is packed full of promising clue-laden situations — your bed floats to a far shore, there you meet the Sanman for the first time under a bucket dug up in a beach, and you have both a bike and a bus to take you to other lands — but the opening screen has said you are thirsty and there is an ice palace that seems to be locked. Nothing makes any obvious sense but you can reason your way to some sort of solution.

For those who like their adventures without pixies, trolls or other mystical creatures the peculiar worlds and problems to be found in **Zzzz** may be a very challenging option. Particularly if you can assimilate shooting ducks, leading orchestras, London busses and the wild west and still hold on to your sanity ■

FACTS BOX

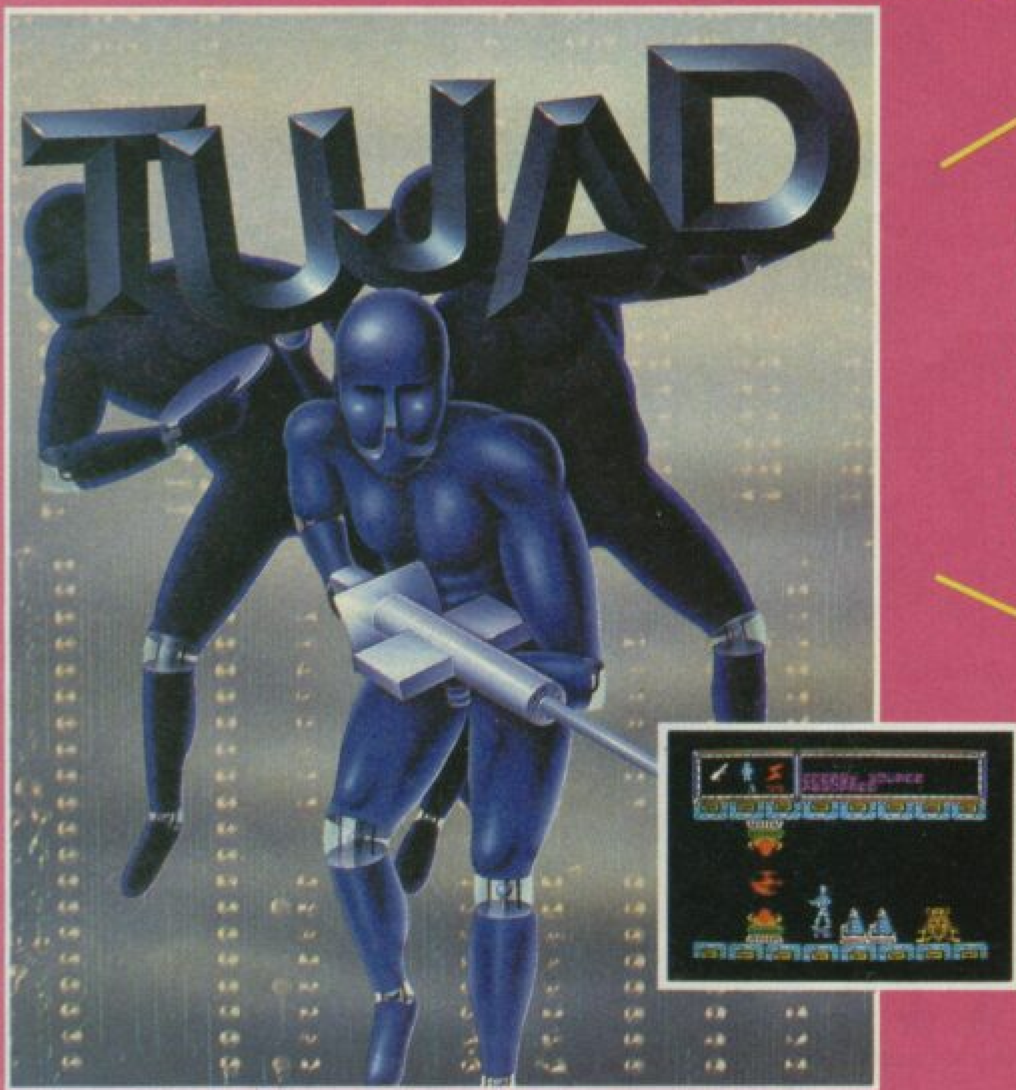
A surprisingly imaginative adventure at a budget price, particularly for those into pixiless posers

ZZZZ
Label: Mastertronic
Author: Clive Wilson and Les Vogarth
Price: £1.99
Joystick: various

Reviewer: Graham Taylor

★★★★★

COMING SOO[N]
to your joystick

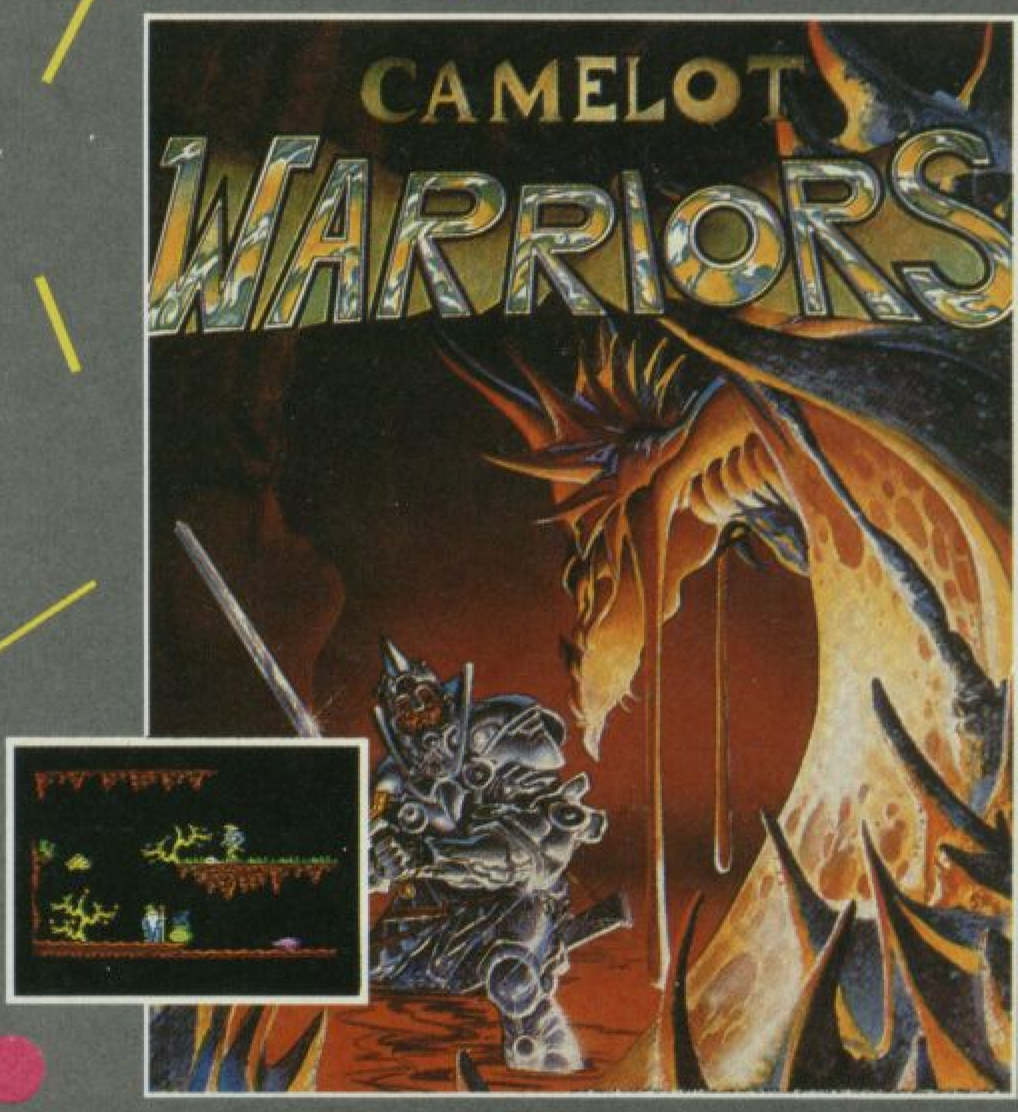


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COMING SOO[N]
to your joystick



Aaaghh! Where am i? What's my name? I have been transported back to the world of King Arthur and Camelot. Land sakes! I now have to fight my way through forest, lake and caves (phew!) to Camelot Castle where I can find the key to the whole mystery! Tempting eh folks? It's coming, so keep up the paper round!

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GORDO'S HELPLINE

Greetings lost souls and stern adventurers! The scrollbag is heavily weighted down this month by the laments and pleas of many hole-dwellers, furry foots and boggits who have just entered Delta 4's latest spoof and who are finding the going tough.

The Boggit

is proving a difficult challenge for some. I don't know how many of you are still incarcerated in Bimbo's nasty little boggit-hole at the start of the game but, judging from the post, it's causing a considerable amount of anguish. Mike West of Knowle Hall, Bridgwater sums up the problem thus:

"I've just read the review of **The Boggit** and thought it sounded so good that I bought it. However I'm stuck in the hole and can't really get started. I've got a few questions. First, how do I get out? I've searched thoroughly and found a diary containing some birthday dates but I can't find any way to use them. Is there any way of opening the medicine cabinet? Is there anything in the round green toilet that might be of use to me?

Much the same plea came from A R Moran, Robin Carill, Russell Ashby and Rod Albright. The basic problem is how to find a combination to the lock on the door. Most likely, it's a number and the only place you'll find any numbers is in the diary that's secreted in the chest. To get inside the thing you must 3, 6, 1, 8. Having read the book you should, if you think real careful, notice that one of the numbers is impossible. Leaping to conclusions may well be the best method to find the ringer. Type in the number and, hey presto, the door will swing open and let you escape good old Grandalf's exploding chocs.

The medicine cabinet? As far as I know it can't be opened and is probably there just to drive you up the wall as you try to find a means of escape. So to the toilet — looking in this is not really to be recommended at the best of times and I assure you that you'll find nothing of use to you, though you may well come across something distinctly unpleasant — and it's not what you think.



Phil O'Malley of Sale, Cheshire and Kevin Richards of Nuneaton have both managed to work out the combination but have run into difficulty further on. Says O'Malley: "How do you get Thorny, Grandalf and the twelve oderous dwarfs out of Fag End to follow you? I'm asking this because the talk command doesn't seem to work! Next, how to get the sword out of the trolls' cauldron without being eaten by them — and how do you avoid dying from hunger when there doesn't seem to be anything eatable around?" Kevin has a similar problem with the sword and would also like to know how to get a rope.

To get the company to follow you, badly hungover though they are, you must first type in 10, 2, 5 — this sets up the 'talk' routine. Then simply say 12, 4. If you want to get the sword or enter the trolls' cave it's essential to first destroy the trolls — or they'll eat you. The wandering scholar you'll meet as you leave the hole at Fag End will give you a vast array of clues about how to do this. Only one word is needed and I suggest you all go out and look at some traffic lights as the itinerant student tells you to — the answer is a sort of warped version of the solution in **The Hobbit**. Persevere.

As for food, I seem to remember something about free lunches from Elrond in **The Hobbit.** Why not be polite to old Smelly and see if he's equally generous. Robin of Sherlock, Delta 4's earlier spoof hit is also causing problems.

Marian Davis of Devon wants to know how to get into Godfather Smurf's house and what the purpose of the carving knife and gnome are. I hastily consulted Fergus McNeill himself on the first philosophical point. "Hmmm," he replied rather vaguely — it was still early in the day, only just after lunchtime — "Basically, things in the forest are becoming corrupted *(you can say that again, G.G.)* and you have to find out why, how and by whom and then put it right. OK?" Thanks, Fergie.

Examine the gnome carefully and you may find that they're connected with the Smurfs and the Convent. As to Godfather, don't try to enter the house. Try listening outside at a convenient spot. Ignore the knife — it's just there to torment you.

Heavy on the Magick

is still provoking huge heaps of mail and I've reviewed by far the most comprehensive and accurate information so far on how to play from D J Sayer of Retford, Nottinghamshire.

"It's another brilliant, true adventure from Gargoyle," he says, "I hope these tips will help any who are stuck in Graumerphy.

"The first thing to do is find the extra *Call* and *Transfusion* spells. The latter can be found by following these directions and blasting a couple of trolls along the way — E,N,N,N,E,N,NE,SE, S,S,S,W,SE. Get the spell and retrace your steps to where you entered the 3rd



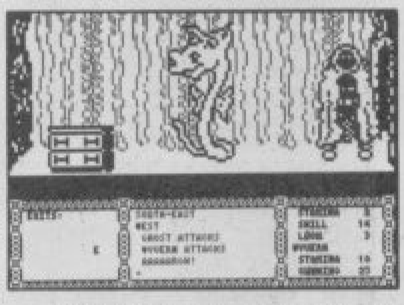
GORDO'S HELPLINE

level. "Now go west, blast the troll, pick up the clasp and then go E,S,S,E,E,E,. Pick up the scroll. You now have both the extra spells. Go back and fetch the bag of gold, then head S,W — picking up a loaf on the way —, SW, E,E. Drop the bag on the table to open the toll door. Enter the room and pick up the sunflower — this provides you with a talisman which allows you to safely invoke Magot who can tell you where objects are.

"Return to Wolfdorp and enter the gates *(I told you all how to do this last month. GG)*. Go N and NW and pick up the sword and talisman for Astarot who can transport you anywhere. The next step is to push up your magical grade — you, O Large One, gave us the means to advance to Zelator. To rise to Practicus, follow these instructions. Go W from the Room of Misery, then S, E, SW, E. After quieting the waterfall go E. You'll come to a door which needs a key. Keys when found will always be in a room with a zodiacal star sign. A room with a locked door will have a name connected with a certain sign — for instance 'the room of pride' will need the Leo key. So then, open this door and proceed N,E,S,E where you come to Tertia Porta. To get through this door you must have the knowledge of the Phoenix.

"To meet the Phoenix find and take the egg, with a bit of help from Astarot. Use Astarot again and transport to Nidus, travelling S from where you land up. Now E — open the door before you with a bag and then head N,SE,SW,E. Here a fiery nest burns. With the protection of the Salamander clasp, drop the egg into the nest and move right. Say 'Nest, Phoenix' and the bird will rise from the flames. When asked about the door at Tertia Porta it will answer 'Laza'. Saying this to the door at Tertia Porta will up-grade you to Practicus.

"The highest grade attainable in this module is Philosophus. Transport to Slymole and then go SW,S,SW,S twice and then E to the room of purity. This is entered with the Virgo key. Through the door go SE and E and then follow the



instructions from the guards to get a nine letter word beginning with S. You are now top grade and can set out to find your first exit from the dungeons.

"Transport to Lichgate and then go S and E. Examining the rock here you will find it's inscribed with the word 'wantootoo' — or, in numbers, 122 — the talisman needed for Asmodee the Destroyer. With this knowledge you can destroy the door and get out to the Tomb of Taro, a future **Heavy on the Magick** module. Now go W,N,N,NE,NE to meet Rabak, a dragon who will let you by if you can utter his last name. That name is the opposite of what you might expect and will quench flames. If you guess correctly he will hide in shame and you can return to the Room of Misery via Wormring and the Chasm.

"Transport yourself to Heaven where you can find another exit. The password is long and can be obtained from Ai, Mistress of the Scullery in the Kitchen of Ai. The door here leads to another module. Ai can be reincarnated by placing the skull, thigh and ulna bones into the cauldron and saying 'Achad'."

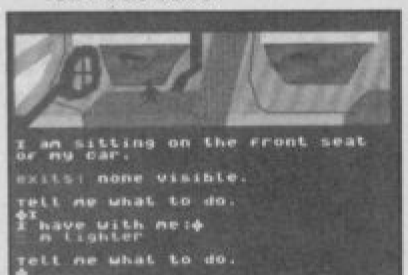
This should see most of you through great swathes of the game and shows the real complexity and ingenuity of the solution — there is still more I'm sure.

HEAVY ON THE MAGICK: THE KEY TO THE KEYS

ZODIACAL NAME	KEY SIGN	ROOM DESCRIPTION
ARIES		THE ROOM OF FLUX
TAURUS		THE ROOM OF HORNS
GEMINI		THE ROOM OF TWO
CANCER		THE ROOM OF CLAWS
LEO		THE ROOM OF PRIDE
VIRGO		THE ROOM OF PURITY
LIBRA		THE ROOM OF SCALES
SCORPIO		THE ROOM OF STINGS
SAGITTARIUS		THE ROOM OF ARROWS
CAPRICORN		THE ROOM OF NANI
AQUARIUS		THE ROOM OF HYDRA
PISCES		THE ROOM OF ICTHUS

Microman

from Fourmost Adventures finds you shrunk to three inches high and shivering. Jason Roberts of Shrewsbury asks how to get out of the fridge — he also says he has the grappling hook but can't do much with it. No need to become an icicle — just 16,7. The grappling hook is of use only when you need to climb the 18,9. Jason would also like to get hold of the Scott Adams Hint Book and doesn't know where to ask. Now that Adventure International has become part of US Gold it's probably best to give them a ring and enquire — the number's 021-356 3388.

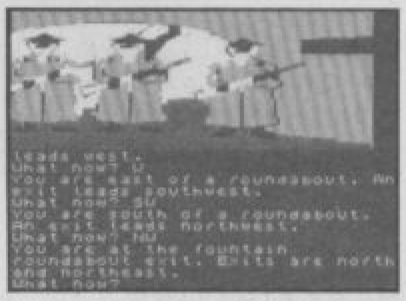


Jackie Holt writes: "Your mightyness, I'm stuck in the sink in **Microman**. How do I get out? I've also got my recognition card so how do I use it to enter the lab?"

There's no sink in **Microman** so I assume Jackie means she's fallen in the bath. Alas, there is no way out of here — once in you're done for. To avoid getting into it in the first place you should 11,20 to pick up the mirror. This mirror is needed to enter the lab, along with the recognition card. After examining the door you must 22,15 and then, simply, 19. By the way, Jason has thrown in a couple of hints for **The Mural** — part of the same compilation tape. If any of you want to get past the giant sandwich - eating penguin you need to type in "Read book" four times — on the last input an exit should appear. The other tip is to pull out the pin at the back of your computer whilst playing and see what happens. Droll eh?

Worm in Paradise

Patrick Dolan of Dublin can't approach the alien ship without being killed. To deactivate the alarm you must throw things from the roots — after a few false alarms it should switch off. If the gas gets you when you approach, you should be sure to wear the spacesuit which is made from the helmet and leotard.



Terrormolinos

Shirley Edge of Wrexham can never trace Mr Snargsby on the coach trip — he vanishes in the catacombs. To find him, go down into the catacombs and 25,29. Then 33 Snargsby and retrace your steps. Amir Dekel of Herzelia, Israel keeps getting killed by sunstroke. "Where's the hat?" he begs. As he doesn't come from this part of the world, he may not realise that British holidaymakers don't bother with hats — they 26,31 instead.

Marsport

Mailor the Necromancer of Sealand Road, Chester has been repeatedly wasted by the sonic bomb. First 32,27 then enter the room and wait for the bomb to explode. Replace the 27 in the locker for re-use if needed.

So, till next moon, keep searching, keep writing. Farewell ■

Gordo 'Il Presidente Pinko' Greatbelly, Landlord

Key to clues

1: The 2: To 3: Climb 4: Me 5: Grandalf 6: Into 7: Out 8: Chest 9: Desk 10: Talk 11: Jump 12: Follow 13: Card 14: Switch 15: Mirror 16: Climb 17: Car 18: Tall 19: In 20: Across 21: Insert 22: Use 23: Short 24: Bubble 25: Go 26: Wear 27: Earmuffs 28: Fissure 29: North-West 30: Blow 31: Handkerchiefs 32: Collect 33: Call 34: Damn 35: Swing

sinclair user COMPETITION



The Competition, they said could not be run. Despite protests from humanitarian organisations, we feature above the entire *Sinclair User* Team pictured shortly after completing the standard EMAP 32 mile induction Weekend in the Derbyshire Peaks.

As you can see some members of the team were so disorientated they imagined themselves to be amongst other things, an ex-member of the Velvet Underground, Oliver Hardy, an Elk and old Joe the sheep farmer.

The course took place on some wild plains just outside Manchester which leads us neatly (*neatly? You must be kidding, ed*) to Design Design and its T Shirts. Design Design has released a great new game called Nexor, and to celebrate the fact Design Design is giving away 50 magnificent T-shirts to the lucky winners of this month's competition.

Examine the picture of the *Sinclair User* team. Study the expressions, the dress style, marks of authority and answer this: Which of these people is the Editor of *Sinclair User*? Write down the appropriate letter on the form below and send it in to: Spot the Editor Competition, Sinclair User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Closing date is November 21.

Name: ....

Address: ....

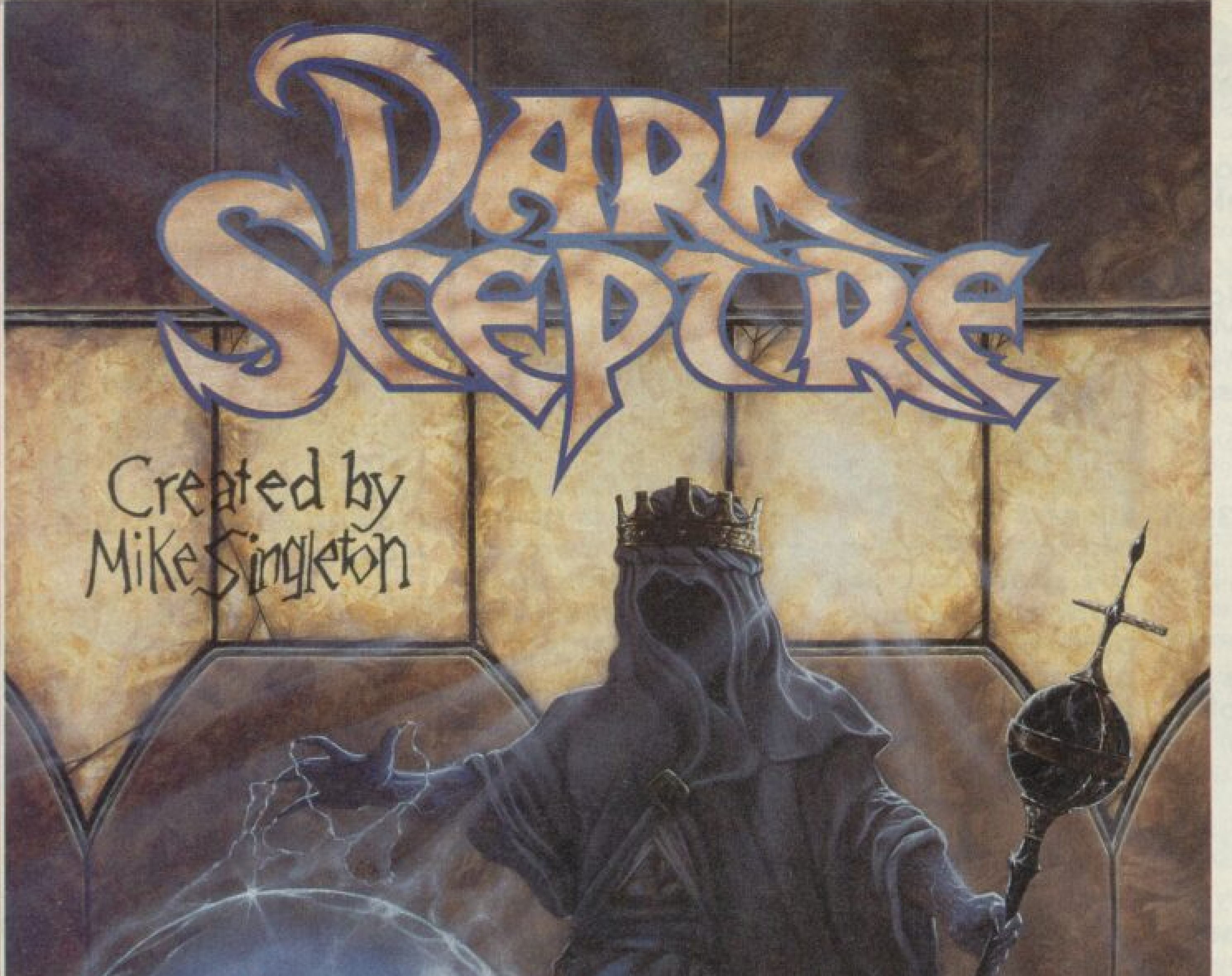
....

....

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I choose person .....

***Anyone even the slightest bit connected with EMAP and Design Design may not enter.**



You are playing in a vast contest. All over the country hundreds of others strive like you to seize the Dark Sceptre. On microdrive cartridge you send us your commands and we return to you the latest news of your warriors — one episode in your struggle to power.

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Having a Microdrive can change the way you use your machine and expand your programming horizons. Now *Sinclair User* has made it possible for everyone to experience the benefits of high speed loading and expanded storage.



Pack details:

1) Interface One — the link between your Spectrum and the Microdrive containing all the driving software. It sits neatly on the back of your machine and also provides an RS232 interface for connection to printers, modems and networking sockets to enable you to share information with other Spectrum users.

2) Microdrive unit — the drive unit into which you slot the Microdrive cartridges.

3) One demonstration cartridge which explains some of the things you can do with the system.

Cheques for £51.50 (which includes postage and packing) should be made payable to Applied Technology and sent to: Sinclair User, Microdrives offer, 30-32 Farringdon Lane, London EC1R 3AU. Please allow 28 days for delivery.

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◄ The Music Machine package

Music Machine

Music is one area where the Spectrum — particularly since the 128K — is beginning to shine.

Now, after Cheetah's Spectrum sampler comes another potentially very exciting music peripheral — Ram Electronics' Music Machine.

Music Machine is a very sophisticated, yet low-cost (£49.95), hardware and software device which lets you sample and edit sounds and musical notes, store them, and play them back.

Its pedigree is interesting, too. The Music Machine has been developed by a group of ex-Sinclair employees — calling themselves Flare — and much of the development work on Music Machine was apparently originally intended for use in Sinclair's abortive Amiga-bashing Spectrum compatible — the Loki.

The Music Machine, like the Specdrum, has circuitry to play digitally recorded sounds into an amplifier.

Unlike the Specdrum, it also has the wherewithal to record sounds, and can be linked to external synthesisers or other music machines. This is due to the inclusion of a full MIDI interface. MIDI is a standard adopted by synthesiser manufacturers, much the same as RS232 for computers but a lot faster and easier to use. It allows any synth to drive any other synth, sequencer or drum machine similarly endowed. It's proved very popular, and few professional electronic musical products of the last couple of years lack the facility.

Before launching into the review, it should be made clear that the hardware and software tested were preproduction, and thus prone to a bug or two. This has meant that I couldn't test a couple of features. Ram assured me that everything will be hunky-dory at launch.

Setting up the Music Machine is painless. It plugs into the Spectrum like any other peripheral, and it has a headphone socket, so you don't have to bother with amplifiers if you don't want to. The software comes on cassette, but has a *Transfer to Microdrive* function.

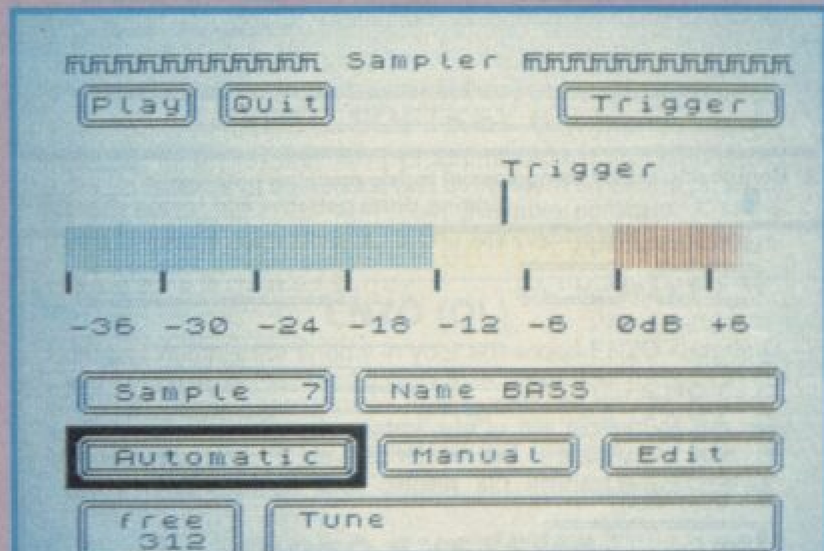
On powering up and loading the software, you're confronted with the main menu: various options, each selected by a single keypress. Also shown is the list of sound samples currently in the machine (up to eight at once), and the amount of free space in milliseconds. This free space indicator is visible on most options, so you can fine-tune the space given to each sample.

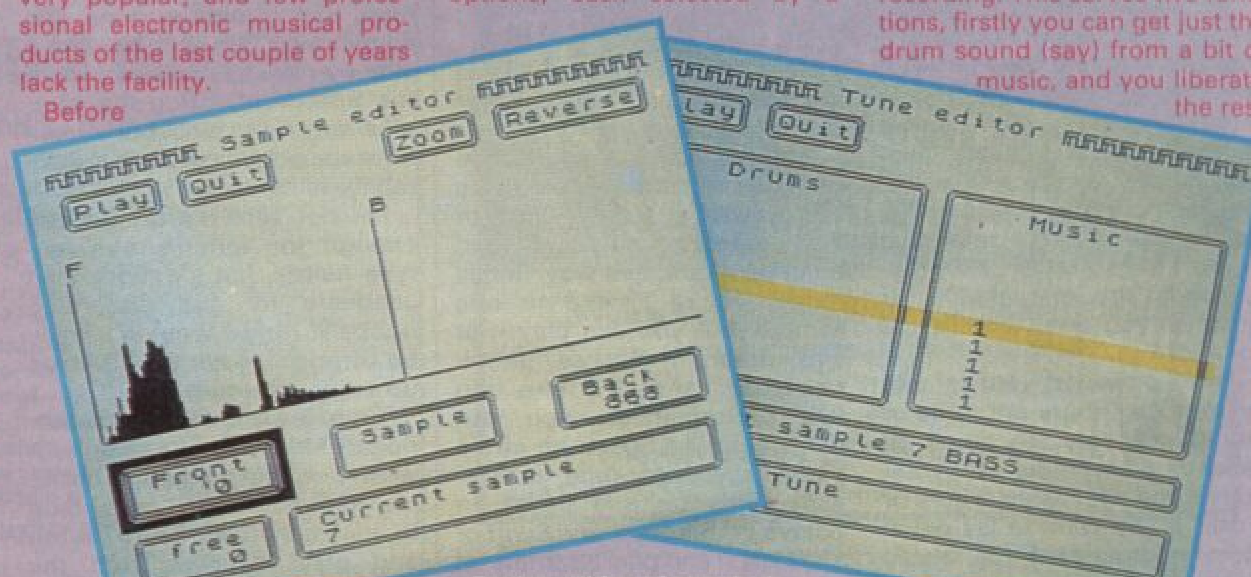
Sampling is the name given to the process of recording a sound into Ram. It's as simple as using a tape recorder: place the microphone (included with the MM) near the sound, set the level by twiddling a knob on the box, and press a button. Level setting is made easy by a on-screen meter, and the sampling process stops when the machine runs out of space.

And there's your sample. Press P for play, and it replays in the headphones (or amp, if you've connected one).

This is just the start. Press E for edit, and you get a graph of the sound you've captured. From this, you can reverse the sample, or zoom in on any part to check for distortion. Unfortunately, there are no further editing facilities, so you're limited to purely natural noises. By moving a pair of pointers, you can select any portion of your recording. This serves two functions, firstly you can get just the drum sound (say) from a bit of music, and you liberate the rest of the memory which was taken up with unwanted bits of the sample.

Memory is a problem with the Music Machine. For various reasons, only the top 32K of a 48K Spectrum's memory can be used to hold sample data. Even though the software leaves as much of that 32K free as possible, that's still only enough for around a second of sound. Dividing that amongst eight samples is not a lot. It's not quite as bad as it seems, though. For a start, drum sounds are almost always only about a tenth of a second long, so there's enough there to get a very useful kit (a

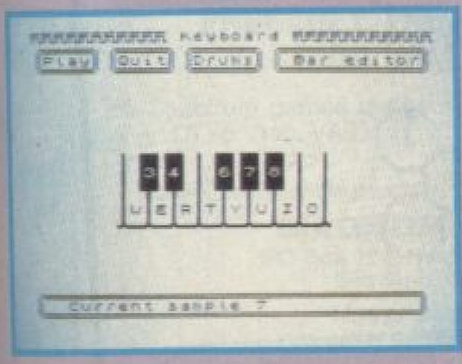




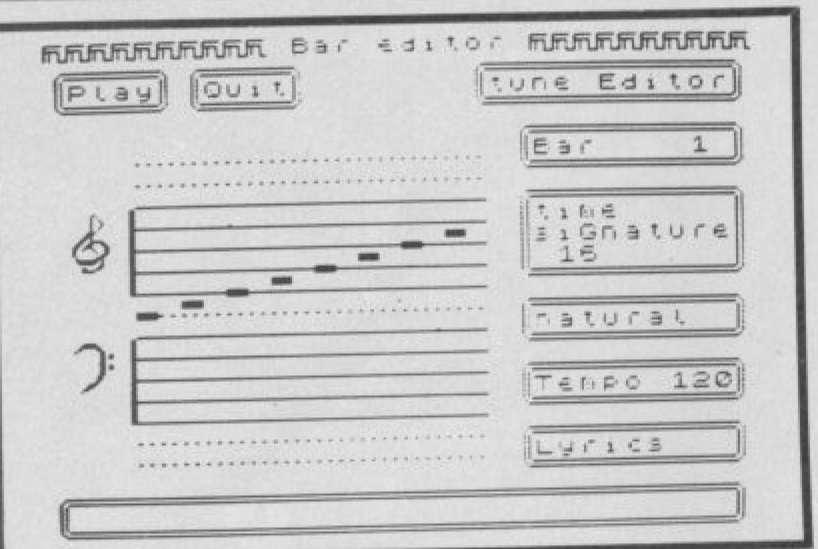
Further editing of sounds ▲

▲ VDU can display the sampled waveform graphically

Using the Spectrum as a keyboard ● Letters corresponds to Qwerty keyboard notation ● Only one octave, though ▼

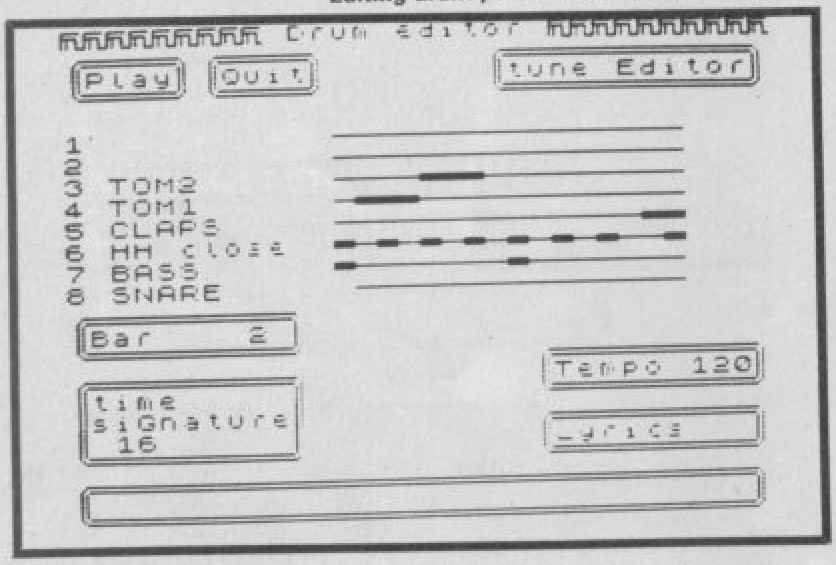


◄ Assigning channels to MIDI



▲ Composing music using special music machine notation

Editing drum patterns and tempo changes ▼



set of drum samples comes with the software, by the way). The software takes great pains to liberate any unused space, and dynamically allocates any it finds to the sample you're currently working on. You can have just one sample of a second in length, or three of 200 milliseconds and one of 400, or whatever you fancy. But it's still not a lot.

Once you've got your sample (or samples), there are three or four things you can do. It all depends on whether you want to treat the sounds as drums or music. If you want to lay down some riddim, then the Music Machine allows you to play up to three different sample at once, and arrange them in bars and into tunes.

Like this, it acts very much as a Specdrum, but the facilities for composition are rather easier to use.

If you're feeling melodic, then you can arrange notes on a stave with a strange sort of quasi-musical notation, and build up a tune that way. In this mode, you're limited to one sample, but you can play it at two different pitches simultaneously. And if you're into live performances, you can either turn the Spectrum into a piano keyboard (one octave, with shifts up and down an octave on the *Caps* and *Symbol Shift* keys) and play a sample on that, or turn a few keys in a drumpad and pat it with your fingers just like a drum kit.

There are troubles with these live play options: the Q key, which is used to *Quit* from the option, is adjacent to the keyboard/drum kit section, and is very easy to press by accident, and there's a buzz on the piano sound when using the piano keyboard. When a sample is played at a different pitch from the original, the length of the note changes, just like a tape player at the wrong speed. Better software would keep note lengths constant, but you can make a sample loop, or repeat until you release a key. With care, this can produce some very plausible choral effects.

As for the sound quality, again, technicalities rear their ugly heads every which way. There are two magic figures for the quality of a digital audio system like the Music Machine, — sample rate and word width. For true hi-fi, you need at least 30-40 kHz for the rate, and 12 bits for the word width. The Music Machine uses 19.4 kHz and 8 bits.

While this means that, no, you can't sample *Dire Straits* and not tell the difference, it does give a respectable response, and you do get a (reasonably) useful amount of space for your digital doings. Some care has to be taken to get the levels right, as the MM seems sensitive to hiss or overload, but properly done the sound ain't at all bad. On a side-by-side comparison with the Specdrum, using the samples supplied, nine out of ten housepersons couldn't really tell the difference.

I'm not sure it's quite good enough for serious musician-type noises, but it's more than adequate for the discerning hobbyist. And I wouldn't really be surprised to her the MM crop up on an album or two.

Then there's the aforementioned MIDI. On my sample, it wasn't working reliably, but in it's good moments I could plug in my trusty Casio CZ101 synth and play samples from the keyboard. Just like a Fairlight.

The MM can also play a drum track whilst outputting two voices of music via MIDI, or drive a drum machine and play two voices of music. There's no analogue sync available, however, and this could pose a problem as MIDI hasn't percolated down quite as far as the budget drum machines yet. The sequencer facilities are rather limited, also, and there's no way of storing incoming MIDI information which is a big shame.

The last thing the MM does is act as a digital delay line. Speak into the microphone, and the requisite number of milliseconds later your voice reappears from the depth of the Spectrum. There's no feedback provided, so for reveberation and echo effects the microphone has to be within hearing distance of a loudspeaker.

Maybe you've noticed that the manual hasn't been mentioned yet. That's because the pre-release notes that came with the MM were accurate, well written and helpful. They did the job well.

The bottom line approaches. I spent a good weekend fiddling with the MM, and enjoyed myself no end.

The hardware is capable and compact, and obviously able to make nice noises.

The software that comes with it is easier to criticise, it does a lot of things moderately well but nothing splendidly. It would have been nice to have a better sequencer, a 'draw a waveform' facility and various preset waveforms.

I also get the feeling that the Music Machine would be a lot happier with at least 128K Ram; an ordinary Spectrum is just a little too restrictive.

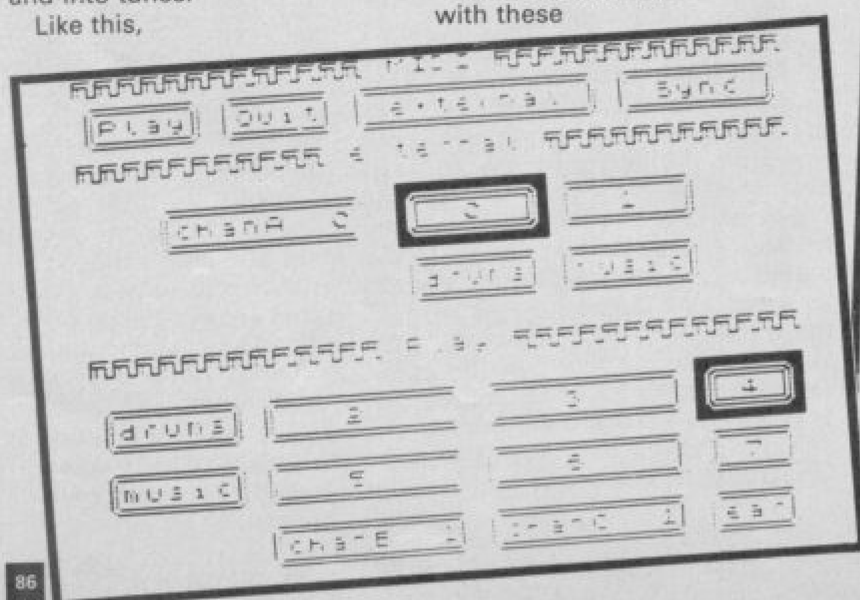
The Music Machine is very good value for money, methinks. At £49.95 it does do an awful lot, but it is limited by the software if you want to do anything more than just play around.

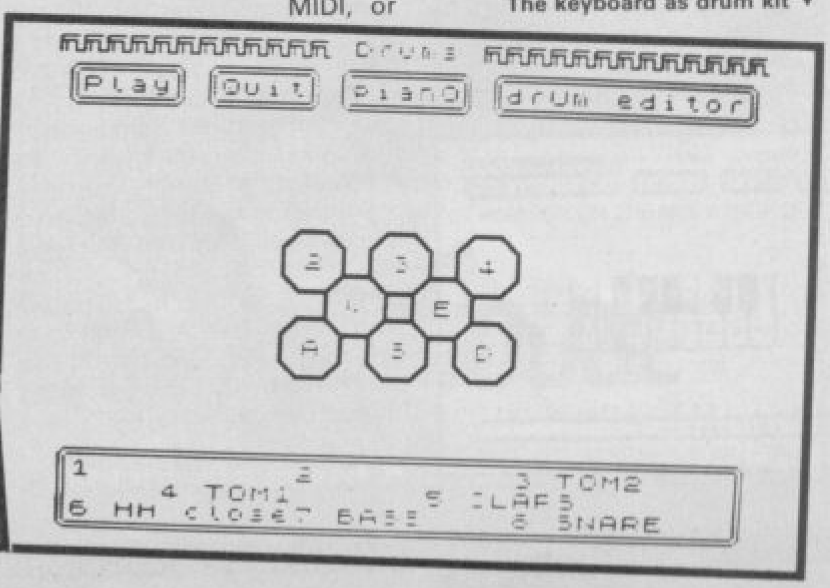
That's a niggle — it must have the highest fun-per-pfennig rating of any Spectrum peripheral to date ■

Rupert Goodwins

◄ External sync of tracks

The keyboard as drum kit ▼





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Batman	7.95	5.50	Green Beret	7.95	5.50	Mikie	7.95	5.50
Turbo Esprit	8.95	6.50	The Ice Temple	7.95	5.50	Yie Ar Kung Fu	7.95	5.50
Quazatron	8.95	6.50	Enigma Force	9.95	6.95	Kung Fu Master	7.95	5.50
Heartland	9.95	6.95	Uridium	8.95	6.50	Knight Tyme (128)	2.99	2.50
			Bobby Bearing	7.95	5.50	Best of Beyond	9.95	7.25

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HARDWARE

First 128K+2 peripheral!

Talk about quick off the mark. Cheetah must take this year's award for the fastest response time ever.

The company has rejigged its best-selling 125 joystick to be compatible with Amstrad's new 128K+2 Spectrum. The joystick was launched at the *Personal Computer World* Show at the same time as the computer itself — that's quick.

The problem with connecting ordinary joysticks to the 128K+2 is that they simply won't work. For what can only be cynical reasons Amstrad has configured the pins in the machine differently from the configeration used in virtually every other machine under the sun — whilst retaining the Atari D-type socket. Assuming a good many people will want to up-grade to the 128K+2 from their existing Spectrum — for which they may have already got some joysticks, absurdly enough, the only way they can use them is in the same old way, ie plugging in an interface into the back expansion port. Craziness.

The joystick Amstrad wants you to buy costs £14.95 and is worryingly insubstantial.

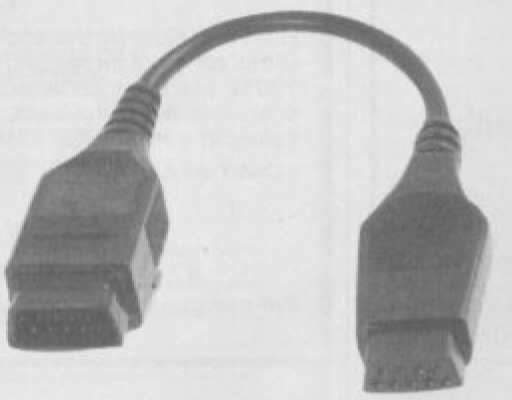
However, Amstrad's hopes of cleaning up in the joystick market seem to have been dashed now by Cheetah. For £8.95 you can buy the 125+, an unpretentious lever-switch joystick that has been a staple unit for a good long while. The only difference between this joystick and the old 125 is the addition of a new grey cable which runs out from the conventionally-wired connector and ends in a repinned connector.

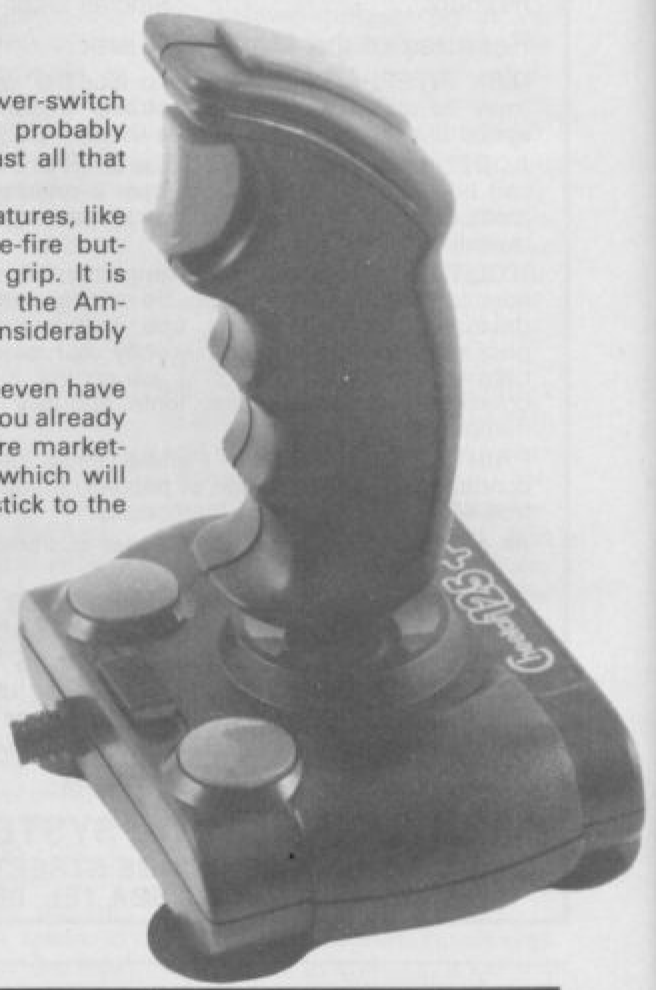
You can tell which is which easily — the 128K+2 section is grey — like the machine itself.

The change is simple and works. It isn't an astounding joystick — like all lever-switch style joysticks I probably wouldn't expect to last all that long.

But it has lots of features, like auto-fire and multiple-fire buttons and is easy to grip. It is certainly better than the Amstrad offering for considerably less cash.

Actually, you don't even have to buy the joystick if you already have one. Cheetah are marketing a lead for £2.99 which will convert your old joystick to the new format ■





MICRODRIVE RECOVERY

TOOL-KIT

```
ORG    60000
LOAD   60000
LD     IX,(23563)
LD     E,(IX+4)
LD     D,(IX+12)
LD     C,(IX+20)
LD     B,(IX+28)
LD     A,(IX+36)
PUSH   AF
```

REVIEW

If you've got a microdrive you'll no doubt be used to unexplained crashes, or at least have heard some hang-up stories.

Roybot has rushed to the rescue with the RamDos utility — an electronic version of Rambo.

FACTS BOX

Versatile and indispensable operating system. Something similar should always have been with the drive

MICRODRIVE MANAGEMENT AND RECOVERY
Label: Roybot
Author: Roy Longbottom
Price: £9.75 Memory: 48K

Reviewer: John Gilbert

★★★★★

The RamDos operating system contains four facilities: *Edit, Status/Recover/Test, Rebuild/Peek* and *Cartridge copy*.

Edit provides an expanded version of the microdrive facility *Catalogue*. It shows type of file — Basic or code — with file size and allows you to copy or erase from Microdrive to Microdrive or tape. Files can also be copied using only one drive by switching cartridges back and forth.

The *Status/Recovery/Test* (SRT) feature also provides a catalogue but shows details of the 180 cartridge sectors rather than files. It provides a detailed analysis of each sector showing file name, sector and record numbers, record length, and the status of a file. It also looks for any format errors within a sector and marks them on a sector map displayed on the screen.

SRT also checks for errors in files. If a record within a file contains an error *SRT* alerts you and the *Rebuild/Peek* part of the package repairs the damage. If the record can't be repaired you have the option of placing the correct information either in the same sector or in another.

Rebuild/Peek reads whatever is readable, finds anything that isn't and repairs damaged sector formats. You can, for instance, read in a damaged Basic listing and patch up the

SPECTRUM KEY WORDS USED

KEYWORD	MODE	SHIFT	KEY	MEANING
AT	K	SYMBOL	I	Access Text
BIN	E		B	Buffer Input
CAT	E	SYMBOL	9	Catalog
CHR$	E		U	Cartridge
CLOSE #	E	SYMBOL	5	Close stream
CODE	E		I	Copy Data
COS	E		W	Compare Sectors
DATA	E		D	Data for sector status
ERASE	E	SYMBOL	7	Erase file
IN	E	SYMBOL	I	Input drive or stream
OPEN #	E	SYMBOL	4	Open cartridge
OUT	E	SYMBOL	O	Output drive or stream
POINT	E	SYMBOL	8	Point to sector
RND	E		T	Random file
SQR	E		H	Sector query
TAB	E		P	Tape back up
TO	K	SYMBOL	F	To

errors in the code. Similarly it will read faulty sectors, without the usual error-checking that makes them unreadable, and allow you to change faulty formats or characters within that sector.

Finally, the *Cartridge Copy* facility provides an extension of the Sinclair Basic *Copy*. It's a small Basic program which, according to the slim computer printed manual, leaves lots of buffer room for a fairly quick copy.

The manual is an integral part of the package with information about microdrive information structure, how to rebuild busted files and the correct structure of a microdrive file. You don't have to digest this information to use the operating system but it gives you a better feel for the mass storage device than the Sinclair manual and shows, in lay terms, the reasons why the system works — or sometimes doesn't.

Roybot's **Midrodrive Management and Recovery** software is like a pick-up truck in the desert. It's indispensable if you've broken down. It's also four-wheel drive and easy to use ■

FREETEXT DATABASE

WORK-OUT

REVIEW

FACTS BOX

A simplistic database. Useful if you have a mass of data and nowhere to dump it

FREE TEXT DATABASE
Label: Roybot
Author: Roy Longbottom
Price: £9.75
Memory: 48K

Reviewer: John Gilbert

★★★★☆

Roybot describes its **Free Text Database** as a 'new concept'.

It's an attempt to do something useful with Microdrives which, I suppose, is a new concept. But the result is really just a utility which stores names, addresses and anything in a free format.

The database is similar to a box of cards, each of which stores 512 characters. One cartridge will store 180 cards. The first card in any file is an index with 36 slots. When an entry is made into the file a new card is displayed on the screen and its existence logged in the index.

When you want to access a piece of information the text file is scanned and all cards which relate to the entry are displayed for your perusal. You can then *View* or *Edit* them to your hearts' content.

The file index with its reference codes A-Z and a-j is displayed on boot-up. Select a letter and type in the title of your card file when the edit cursor appears at the side of the chosen code. The title is optional but useful.

A list of database commands is displayed at the bottom of the screen and they are accessed in the same way as Sinclair Basic keywords.

You have to format a card before you write on it. Each card can have a line length of 32 characters or less and you can justify text either to the left or right of the display. Line widths can be longer than 32 characters but the characters overlap on to the next screen line and are not reduced or squeezed. If you want to print out a card with a longer line width, say 64 characters, the line would be printed in full without overlap — as long as the printer can cope with that setting of line width.

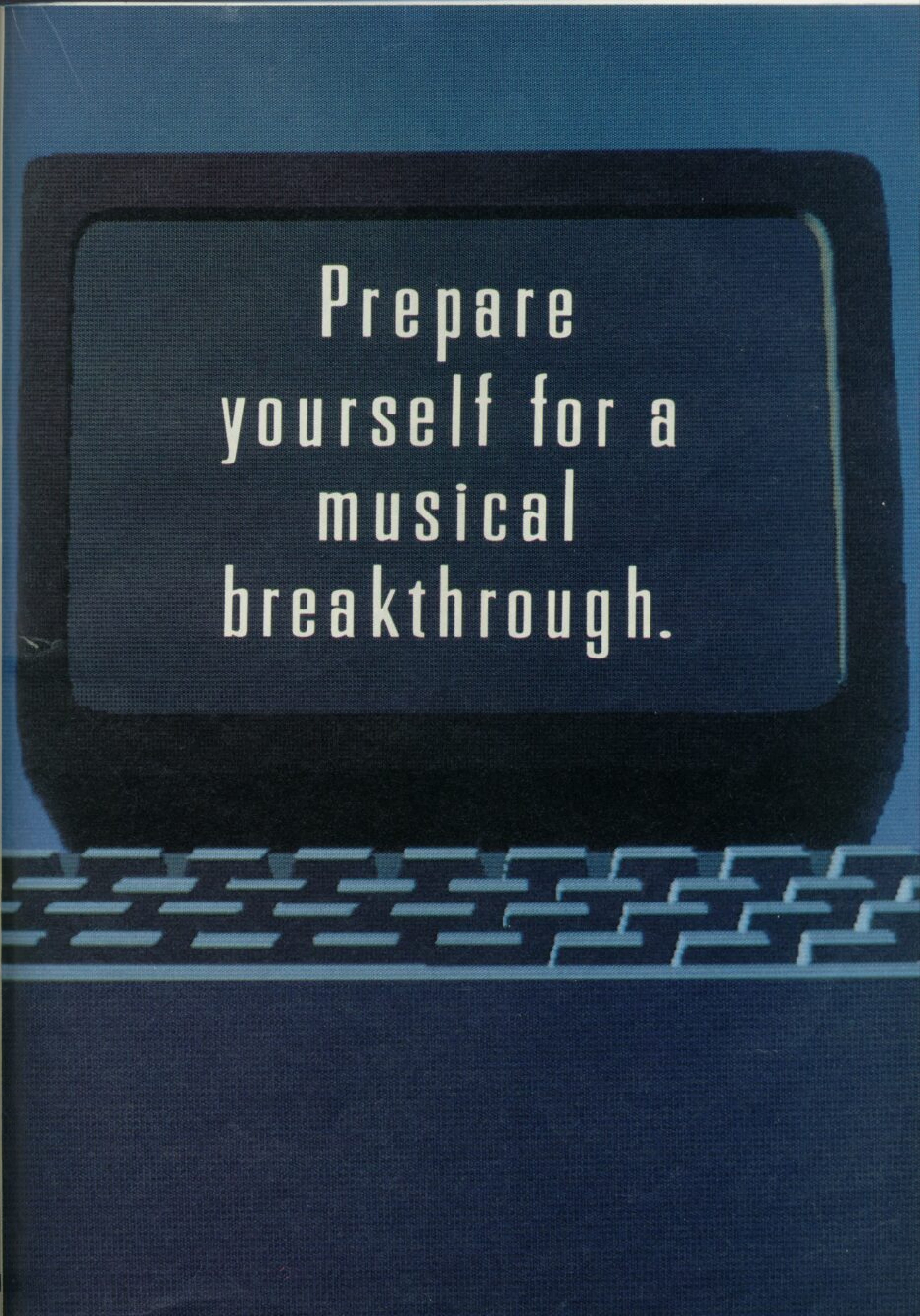
Editing a card is easy. Just select the file name and then the entry you want to change. You might, for instance, have contracted the word 'Wednesday' to 'Wed' and want to expand it. Move the cursor to the end of the text to which you want to add and type in your correction. You can up-date the card in a similar fashion. Point the cursor at the questionable text and use the *Delete* option to zap it.

Once you're happy with the cards you can scan them for data. Each item has a line number so you simply select the relevant file and page through all the entries related to the key. For instance three cards may hold a reference to the text key so you'd have to page through all three.

The database is written in Basic but uses a series of Basic extensions from Roybot's RamDos operating system (also reviewed, this issue) to increase search speed. The result is an easy-to-use electronic scratchpad which is not particularly innovative. It can be used to store a mass of unrelated data but isn't particularly attract for use by a high flying business executive.

The simplicity is there but the display and store format is inflexible. If you are such a high flyer you'd better forget **Free Text Database**.

If, however, you're the sort of person who forgets their own name go get it ■


Prepare yourself for a musical breakthrough.



Introducing Music Machine.* The incredible new add-on that transforms the Spectrum into a powerful music computer.

A host of exciting musical features makes Music Machine the most complete Spectrum music package ever created.

There's sound sampling, the latest buzz-word in electronic music that lets you record and play any natural sound at different pitches. (Use the microphone to pick up anything from a whistle to a barking dog).

Eight 'voices' include drums, piano and synthesiser – you can edit them, or create new ones. A powerful drum section with real drum sounds and a complete rhythm editor.

And for budding composers, powerful professional features like note and tune editing, playable either from the Spectrum itself or a music keyboard.

Enthusiasts will appreciate the ability to link with other instruments via MIDI (the professional music interface) and



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SAGA SYSTEMS' PRINTERS



THE COMPLIMENT LQ PRINTER

The Compliment LQ Printer can print at 150 c.p.s. in draft mode, 120 c.p.s. in standard mode, 60 c.p.s. in correspondence mode and 25 c.p.s. in LQ mode. It has a parallel printer interface, with 2K buffer, pin and friction paper feed and a front panel switch display. 9 international character sets are available to be printed by a bi-directional 9 pin replaceable print head in many styles. It is very compact, attractive and offers superb value for money.
Let this printer compliment your pocket.
£199.95 (incl. VAT and Manual)

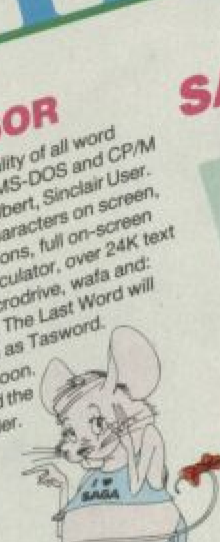


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PRICE £13.95 (incl. VAT and Manual)

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- Basic mail merge • Software to allow use of Saga Star Mouse
- SPDOS Disc System software interface
- Extended software for page numbering, headers & footers etc

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The Saga Disk Drive Interface 1 can run 3", 3½", or 5¼" disks. It can also run 40 or 80 track single or double sided disks of single or double density.
The drive interface is extremely fast and has a greater storage capacity than any competitors'. It supports microdrive software. Simplified, user-friendly syntax or normal Sinclair Microdrive syntax is available.
The interface also incorporates a magic button. This button allows everything in the computer memory to be transferred to disk at a typical transfer time of 3½ seconds.
Any number of snapshots can be taken and this can be done as many times as you wish up to the capacity of the disk. This is a particularly useful facility for loading screens of machine code games.
THE PRICE IS A MERE **£69.95** (incl. VAT)

The Saga Disk Drive Interface 2 has all the facilities of Interface 1, plus a printer interface which supports any parallel centronics printer and uses Sinclair basic syntax and provides Epson graphic compatibility.
It has a joystick interface which is Kempston and Sinclair compatible and also provides a facility for a network connection. This connection allows up to 64 Spectrums to share disk and printer resources.
Finally a standard expansion connector means other Spectrum peripherals may be connected.
THE PRICE IS **£89.95** (incl. VAT)
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If you want the best for your Spectrum, ensuring it advances with technology, the Saga Systems' collection of keyboards and peripherals is essential. And they are all compatible with the 48K and + Spectrum.



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". . . Good looks . . . works remarkably well . . ." – Sinclair User.
". . . remarkable . . . value for money." Sinclair User Annual 1985.
"particularly like the extra caps and symbol shift keys . . . brought the computer to life in quite an unexpected way . . ." Primary Teaching and Micros.
PRICE £39.95 (incl. VAT)

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With its infra-red transmission, the Saga 2001 can be used while you walk around the room. No wires link it to the Spectrum. It has 101 keys and it is simply out of this world.
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*The Last Word Software is available free with the Saga 3 Elite and the Saga 2001, if purchased by mail order.
The Saga Lo-Profile is still in stock **PRICE £39.95** (incl. VAT)

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Microdrive extension cable. For use with your Saga 3.
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COMPETITION

If you spot our poster in a computer shop you may win a SAGA 2001 KEYBOARD.
Simply: Send us the name and address of the shop, and your name and address and you could be lucky!

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SAGA 2+	☐	£54.95	£1.50	____
SAGA 3 Elite	☐	£69.95	£1.85	____
SAGA 2001	☐	£119.95	Free	____
LO-PROFILE KEYBOARD	☐	£39.95	£1.50	____
128K Keyboard up-grade kit (for Saga 3 only)	☐	£4.99	Free	____
LTR1 PRINTER	☐	£119.95	Free	____
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MICRODRIVE EXT. CABLE	☐	£4.95	Free	____
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FLEXICABLE	☐	£11.95	Free	____
CENTRONICS INTERFACE	☐	£34.95	Free	____
SAGA DISK DRIVE INTERFACE (1)	☐	£69.95	Free	____
SAGA DISK DRIVE INTERFACE (2)	☐	£89.95	Free	____
THE LAST WORD	☐	£13.95	Free	____
TLW SOFTWARE EXTENSION	☐	£4.95	Free	____
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SURGERY

Sinclair Surgery

Spectrum on the blink? John Lambert has a cure

Bugs from the past

SOME WEEKS ago a program of mine went wrong and I thought I had a bug in it. After a while I found the place whre the bug ought to have been but there wasn't one! I checked and rechecked the line but nothing was wrong. I thought I had gone crazy.

I then put in some variables to make another check outside the program, and when I saw the result I couldn't believe my eyes.

The bug was in the Rom!

Type PRINT 32−9 and you will see what I mean. I tried this line and found the most astonishing results:

FOR a = 1 TO 100: LET a1 = a*a: LET a2 = a2: PRINT a;" ";a1;" ";a2,a2−a1: NEXT a

I would appreciate your comments.

Hans Pedersen Dambo
Sweden

● *You have found one of the remarkably few bugs in the Spectrum Rom. For other examples see* 'The Complete Spectrum Rom Disassembly' *published by Melbourne House.*

Interfacing multiface

I OWN a Multiface One (Romantic Robot). I have the following two problems:

The video point connects to what? No joy connecting it to a standard T.V. Set *or* my Sanyo colour (med res) monitor via the video input (RCA type plug). There is a separate RGB input. Would this help?

When I have my Tasman 'B' printer interface connected to the through-pont at the back of the Multiface One, I find the Kempston joystick attackhed to the unit jails to allow movement to the right! (It's obviously easily solved with the Tasman interface disconnected. I was just wondering if this is normal for the Multiface One . . .)

Dr D C Abramson
Cape Town
South Africa.

● *The Video Out socket on the older version of Multiface One should supply a Composite Video signal — for connection to a standard Composite Video monitor. The socket is simply a through connection from the Video line on the Spectrum edge connector.*

On some early Spectrums the signal was not taken out to the edge connector, so no signal will be present at the socket. If your Spectrum is one of these it can easily be fixed with a little soldering.

Open the Spectrum and look for the letters VID printed on the circuit board — they will be close to the modulator. Underneath will be two holes, simply solder a link between them.

Spectrum Plus into IBM?

I HAVE recently acquired an IMP PC green screen monitor and would like to know whether or not this monitor is compatible with a Sinclair Spectrum Plus? If so, this monitor has a 9 pin D-type plug, with pin nos: 1, 2, 6, 7, 8 and 9 connected.

So how do I go about changing this lead to fit it to the TV/aerial socket on the back of the computer?

J Borg,
Stepney,
London

● The IBM monitor has an odd scan rate and it's unlikely you could get a good picture from a Spectrum. With a standard Composite monitor you can take the signal from the Spectrum edge connector.

From tape to microdrive

I HAVE a Spectrum 48K, and a Kempston Pro Joystick Interface. I have been trying to find a cheap and easy way (preferably software) to transfer from tape to micro drive cartridge, but have had no success. I wonder if you could help me out?

Adrian Canning
Gillingham
Kent.

● *Unfortunately it gets easier as you spend more money. Try contacting LERM, 10, Brunswich Gdns, Corby, Northants. NN18 9ER. They do a range of software utilities at reasonable prices.*

Directly to disc?

IS THERE a disc drive for the Spectrum plus, which is compatible with Interface 1, so that programs can be easily transferred from Microdrive to disc without saving them first to cassette tape?

Brian C Bird,
Invernrie
Aberdeen

● *The only disc interface you can plug in at the same time as Interface 1 is the Technology Research Beta (Plus). Although they are hardware compatible they are not software compatible, that is, they use different* Load *and* Save *commands.*

The closest in software is the Opus Discovery 1, which is only compatible in Basic.

Modems for micros

PLEASE COULD you tell me whether or not it is worth me buying a VTX 5000 modem?

I am looking for something new to do with my Spectrum. Prestel and Micronet 800 seem to be ideal answers. Cound you also tell me if I need an RS232 interface with it?

Robert Johnson
Kenilworth
Warwickshire.

● *The VTX5000 is the standard modem for the Spectrum, it's completely self contained and needs no other interfaces.*

Interfacing and upgrades

I HAVE the following questions for Sinclair Surgery. Could you tell me where I could obtain interfaces or connectors to connect my Timex 2040 printer and Quickshot II joystick, originally bought for Spectrum, to my QL.

M J Bishop
Woking
Surrey.

● *The Timex 2040 can not I'm afraid be connected to a QL. A QL joystick adapter is available from 'amongst other places' RSD Connections Tel: 0920-5285.*

Sunshine in your life

I'VE READ in your magazine *Sinclair User* in May 1986, page 78, that there is a book called *Master Your ZX Microdrive* by Andrew Pennell published by Sunshine Books.

I would like to buy this book but I don't know the address, would you please send my letter to Sunshine Books for me. I'm prepared to pay the cost.

Lennart Brorson
Sweden.

● *Their address is: Sunshine Publications, 12-13 Little Newport Street, London WC2H 7PP. The book is priced £6.95.*

Merging into Tasword 2

I HAVE recently purchased a copy of **Tasprint** from a local software retailer. The tape was reduced in price because it is an older version of **Tasprint**.

Can you please help me with the various code required to run on my printer. Me set up is: Spectrum + 48K, Opus Discovery 1 Disc Drive, Amstrad DMP-2000 Printer, Prism VTX 2000 Modem, Romantics Robot Multiface 1.

What I would like to do is merge **Tasprint** and **Tasword** 2 (which I have on disc, so that I can use this set up to produce our weekly Church Newsletter and Youth Club notice board.

Can you please help?

R A Dennis
Whickham
Newcastle.

● *As far as I can determine the Amstrad DMP-2000 uses a Seikosha mechanism — so you can use the relevant codes supplied in the manual. Merging the two programs on disc is a little more involved, I suggest you give Tasman a call on 0532-438301.*

No future for microdroves?

I OWN a 48K Spectrum and have been wondering if it is safe to buy a microdrive and will I still be able to buy cartridges in 2 years or is Amstrad stopping the microdrive system?

Alastair Wheeler
Ponteland.

● *If I could tell what Amstrad will be doing in two years time I would be a rich man. All anyone can say is that cartridges are in plentiful supply at the moment and — in the short term — should remain so.*



The Americans have invaded! Two QL packages from the States have winged their way across the Atlantic and their manufacturers, Teseract Software Development and Sharp's Inc, are keen to show that they can compete with the French and the Danes.

Yanks like their computers chunky and you can't get more chunky than the QL which apparently is now, belatedly, attracting some attention over there. The same's true of their software: They like it colourful and epic-sized.

QL gets American stars and bars

Concept 3D

Concept 3D is the first package. It contains only one microdrive cartridge but produces a one-machine*tour de force* rather in the style of an Esther William's swimming spectacular.

Three-dimensional graphics packages usually promise so much but fail to deliver. **Concept 3D**, however, fulfills all its promises and more. It produces two- or three-dimensional images — to your specifications — and rotates them in the x, y and z axes.

Designs are drawn in either TV or monitor modes. There's little difference between the displays but the larger lines and curves of the TV mode look slightly furry and broken. The images on both displays are, unfortunately,out of alignment with the centre of the screen because of differences in the US and UK television systems. The error is, however, only noticable in the glider imag∂ demo that accompanies the package.

The screen is split into three windows. A one-line status panel at the top of the scren shows the percentage of memory used by your images, the window magnification factor, view — front of side — and the model number. Complex models, such as the glider, sometimes require nearly half the available memory but you can store a maximum of 50 images on the computer-defined Ram disc.

Command menus are displayed beneath the main design window. You use one key to enter each command; the first character of the command in either caps or lower case mode. Those keywords are paged through using the*F3* function key.

Cursor control

The design window initially contains a cross-hair cursor and a direction indicator, showing the directions of the x, y and z axes. The cursor is moved either by direct input or cursor keys.

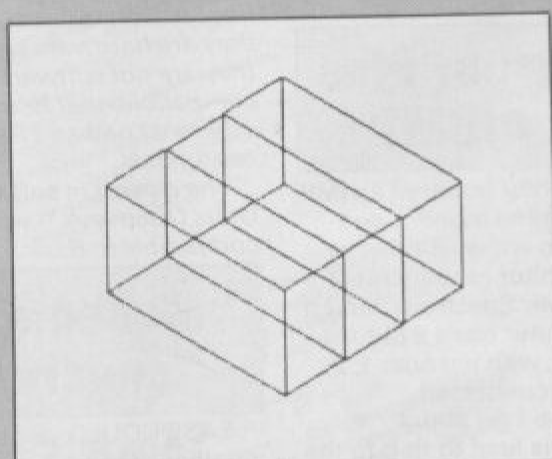
For direct input enter the letter of the axis you want to move the cursor position and the number of pixels from origin to destination. Positive numbers move the cursor up or to the right and negative values take it down or to the left.

Cursor key movement can be scaled to meet your speed requirements. You may, for instance, want it to move slowly across the screen so you'd set the move factor at one or two units. Alternatively it will move in long jumps with a large factor number such as five or nine.

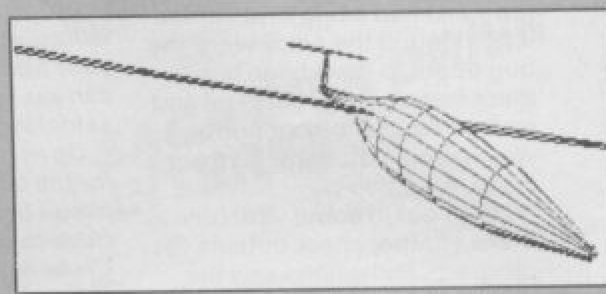
Each three-dimensional image is composed of a series of slices, called cells. First you choose your model number, side view and design starting point. From the start point you design you first two-dimensional cell shape using rubber-banded lines, circles, ellipes and curves.

If your shape has a constant cross section you tell the computer to replicate the image a number of times — one behind the other to give the image its 3D quality. You could for instance state that the image is composed of three cell slices one behind the other.

Boxes also are easy to produce. Not all objects, though, have a constant cross section. Some will vary in width and shape as you go through them. The solution is, however, simple for **Concept.** Just specify the shape variable and you can design each of the cell depth components.



▲ The 3D rectangular box is made up of three smaller boxes, called cells ● All 3D Concept images can be created in a similar manner

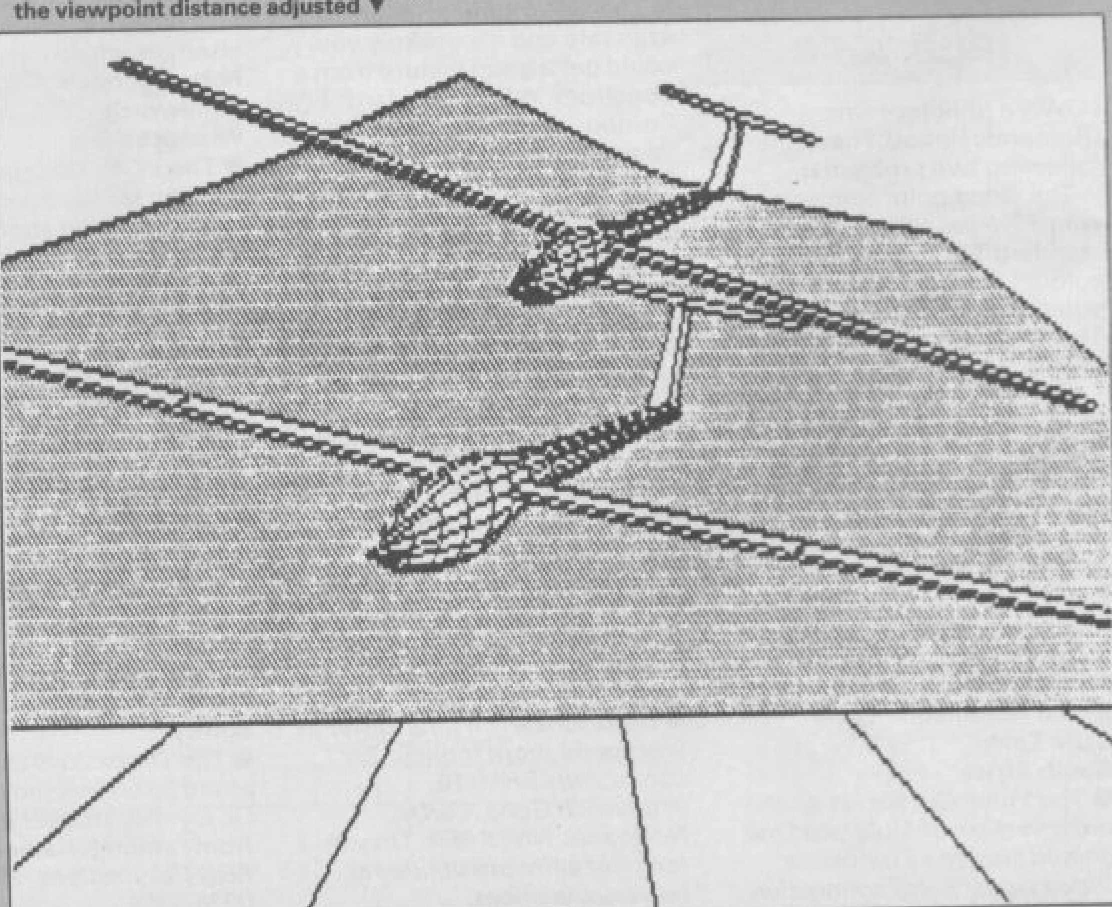


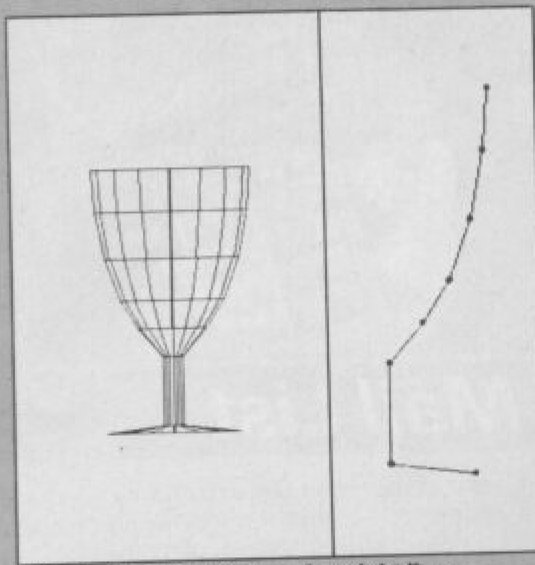
▲ The perspective on the glider is altered by a change of viewpoint and plane ● The QL makes the left wing longer and the right wing shorter ● The nose is dipped

Printer perspectives

Once you've done all the hard work you can sit back and maniputlate your image. The computer produces a simple isometric viewpoint. The display default shows your object's hidden lines but a surface command redraws the image and excludes the view of the underside. Perspective can also be changed so that you can exaggerate the closenes of parts of the image to your viewpoint or make it grow smaller.

The glider example is stored as a separate demo file ● The image can be rotated in any direction and the viewpoint distance adjusted ▼





▲ **The goblet is made up of straight lines, despite its curved appearance ● The program can also compose a circle using lines**

Screen dumps of your image are obtained using the Psion **Easel** package which will dump to Epson compatible printers. No two Epsons are alike — as you may know from experience — and some images, such as those using circles, will be distorted on paper. That effect is a fault of the QL and printer hardware rather than of the concept program.

Concept 3D is accompanied by a comprehensive manual which acts as tutorial and reference guide. It describes the processes of producing two- and three-dimensional images as well as manipulating viewpoint. The final section shows how the demo screen was built by the programmers and provides design ideas for those of you who already know a bit about tech constructional drawing.

Concept 3D is a valuable tool for designers. The image routines are slow compared with dedicated CAD systems but if you can wait 20 seconds for a complex design to be produced **Concept** will provide an efficient and complex design facility.

Eastern Front

The defence of national honour captivates the American imagination like little else so it's not surprising that the second US import to land on my desk should be a war simulation.

It is surprising, though, that the game, called **War in the East**, should be about the three years of German-Russian conflict during World War II. You handle the Axis — German — powers while the computer mobilises the Ruskies.

Battles take place in a map window that scrolls jerkily from Hamburg across to Moscow and from Leningrad down to Sofiya. Status windows below the map show the type of unit you can move, the phase of the game, and terrain. The Phase display initially reads Movement ZC, meaning that the unit selected to move is in a Zone of Control of a Russian Unit — the Ruskies can bomb the hell out of it. The Terrain window shows the type of ground you are travelling over.

A counter below the status windows gives the Turn and Movement points you have left in your go.

Movement phase

Each mobile unit is assigned an attack/defence as well as a movement allowance — ie two moves, three moves. All units are displayed in the movement phase and you have control of the Rumanians, Italians and Hungarians as well as your own troops. When your turn arrives one of your units flashes — that's the one to move.

The Phase box will either display Movement or Movement ZC. If it says Movement you can relax, the Russians don't control the land you're standing on and you can use the cursor keys to move. The Movement Points Left window shows the number of squares over which you can move. If you encounter a Rusian unit and still have some Movement points you can choose to attack it. If, however, you enter a Russian Zone of Control and don't have any points left you can't attack.

Rain of terror

Movement is affected by terrain and weather.

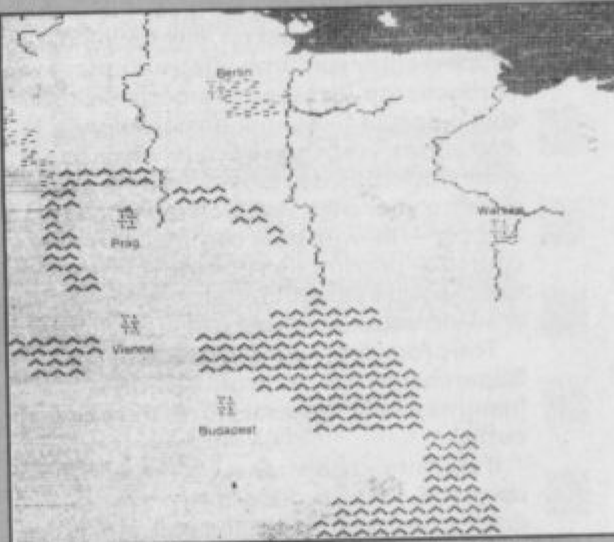
Terrain on the map includes swamps, forests, cities, mountains and rivers. Your forces will, of course, move slowly over swamps, rivers and mountains and move speedily over clear ground.

Weather is dictated by the time of year which in turn is dictated by the number of moves you have made in the game. Turns one to 13 are considered as summer and have no effect on movement, 14 to 16 bring the rainy season in which movement and attack/defence points are halved, 17 to 20 call up winter storms. In winter the map turns white — a nice touch. Your movement is not restricted during those cold months but your attack and defence powers are depleted.

As in any war your basic tactics should not be to destroy enemy units but, more importantly, to capture enemy cities. Once you've moved into a Russian city you attack the garrison there and defeat it.

You'll hopefully be victorious and can set up your own garrison. Don't be complacent, however. The computer's forces are no push-over and could force you into a city-losing retreat. If you decide to move off your city base and there are no Russian troops ready to move in a group of partisans will take your place.

The game could, in theory, go on forever because each side may be blessed with reinforcements. Those appear after both sides have moved and fought: Axis forces come on stage left with the Russians appear from the right.



▲ **A confrontation between Germany and Russia is about to take place on the Eastern Front ● Part 1 of The War in the East**

Three of a kind

War in the East's basic scenario is supplemented by two others to take you right through the campaign. Scenario 1 takes place at Barbarossa in 1941. It covers the initial invasion of Russia and is 20 turns long or only ends when victory conditions are met.

The second scenario takes place in Stalingrad, 1942. It revolves around historical events where the German army, tired of continual defeat tries to knock out Russia's economy. The wheat fields of Southern Russia are the targets and you must deprive the Red Army of its food supply.

In Scenario 3 the Germany Army is spread thinly on three fronts of the war and, suffering from starvation and fatigue, tries to prevent the Red Army's advance into the Third Reich. If you've gained the advantage in the first two scenarios you'll be sorely tested in this one.

War in the East actually isn't very good. It's a below-average simulation with slow gameplay and a map which scrolls in a very sickly fashion. The scrolling is the biggest fault of the QL's software but the poor gameplay could have been avoided.

It takes the computer nearly five minutes to calculate its moves, a time lag which few war gamers are likely to suffer gladly. At least the company could have graded the intelligence of the program so that beginners could chose between an easy, fast-moving game or a tough, ponderous style of play. There are, admittedly, few good British war games for the QL but Sharp's, the manufacturer, could have been better ■

American pie

The United States has small part of the QL pie but, if quality products such as **Concept 3D** continue to come from the country which owns Silicon Valley, the American software houses concerned should congratulate themselves.

Both products reviewed this month can be obtained from the addresses below or, in a few months, from mail-order sources in the UK.

Concept 3D
Publisher: Tesseract Software
More information from Curry Computer, PO Box 5607, Glendale, Arizona, 85312-5607, USA
Tel 1-602-978-2902

War in the East
Publisher: Sharp's Inc
More information from Rt. 10, Box 459, Mechanicsville, VA 23111, USA
Tel (804) 746-1664.

QLINK

Previews

Digital Precision has released three more utility packages — **Turbocharge**, an up-rated compiler, **Lightning** a graphics compiler and **Eye/Q** a new graphics package.

The most important is the up-grade of the **Supercharge** compiler. **Turbocharge** breaks the 64K machine-code limit imposed by its older relation and allows you to write a compiled program with a maximum of 16 gigabytes of code — if required.

It's initial status display takes the form of a flight simulator cockpit with 25 dials which display run-time information. **Turbocharge** includes a SuperBasic toolkit with a host of file-handling commands. It also allows you, unlike **Spercharge**, to write SuperBasic extensions so you can develop your own versions of *Print*, *List* and *Let* — all with new command names of course — or compile your own commands to do weird and wonderful tasks such as drawing squares or stars.

The program costs £10 more than **Supercharge** but the promised new features easily makes it worth the extra outlay.

If you already own **Supercharge** you can up-grade — at a reduced price. Also, you don't even have to lose the painstakingly produced source code you've already written. Everything which can be compiled using **Supercharge** is fully compatible with **Turbocharge**.

Alternatively, you can buy the **Turbocharge Toolkit** — for £10 — and turn **Supercharge** into its big brother.

Just to whet your appetite **Turbocharge** features linking, piping, common variables, more compact code and compiler, faster graphics, parsing of parameters by reference and no more Lenslok.

If you don't want a full compiler you could purchase **Lightning**. It compiles graphics routines for use in your machine-code or SuperBasic programs and offers a wide variety of graphics effects within its pallet of extended SuperBasic commands.

If, however, you prefer to use a proper graphics package **Eye-Q**, DP's graphics package, is also — at last — about to see the light of day.

The screen compression facility is miraculous and, according to DP, intelligent. It will take a 32K screen and can squeeze it into 9K.

Screens are designed using keyboard, joystick or mouse and stored in a user-defined Ram disc so you can switch between graphic jobs. Once you've completed your picture using a vast array of rubber-banded lines, curves, circles, ellipes and airbrushes you can dump it to a dot-matrix printer.

The printer driver is apparently unique. It takes the printer drivers from the Psion's **Easel** and changes the control codes to fit your requirements. It can even set up a colour printer.

More information about all three products and their prices from Digital Precision, 222 The Avenue, Chingford, London, E4 9SE. We'll have full reviews in next month's *QLink* ■



Mail List

Fans of the Psion Organiser, that hand-held computer with liquid-crystal display and little software, can now link it to the QL, care of a software/hardware package from Transform.

The hardware comprises an RS-232 link lead from your Organiser to Serial#1 on the QL. Software support consists of four modules. A **Mail List** program runs under the run-time **Archive** database and allows you to record all your names, addresses and suppliers on Microdrive. The files can then be mail merged with **Quill** files or transferred to the Organiser for portability.

Mail List files can be found, displayed, and finally dumped to the Organiser. You can also reverse the process and pipe files to the QL and on to Microdrive.

The QL can be used as a terminal for the Organiser. Equip it with a printer and you can print organiser files. Alternatively, the display is defaulted to the screen.

The package, including **Mail List** which can be obtained individually for £24.95, is available for £39.95 from Transform, 24 West Oak, Beckenham, BR3 2EZ Kent ■

TRANSFORM LTD. Business Software

EUROELECTRONICS ZXL PRINT III CENTRONICS - RS232 PRINTER INTERFACE

Interface £29.95
Cable £8.85
Inc VAT



Enables your Spectrum 16k, 48k, Spectrum+ or 128k (in 48k mode) to print on almost any dot matrix or daisy wheel printer with RS232 or Centronics input. Just plug in ZXL Print III and LPRINT and LLIST commands will work. COPY works without any additional software on Epson, Star, Brother, Walters, Mannesman Tally, Taxan Kaga, Canon, Shinwa, Citizen, Epson compatibles and a full colour copy on Seikosha GP700. Optional extras are available for 4 Colour screen copies on CGP115, MCP40 & 80, SCP80, and shaded screen copies for Epson compatible printers.

ZXL Print III is also compatible with INTERFACE 1, VTX 5000 modem, OPUS Discovery and BETA interfaces.

Optional extras: 4 copy screen copies £5.00. Shaded screen copies £5.00p.

- **WORD PROCESSING • PLUG IN FOR LLIST, LPRINT & COPY**
- **PRINTS SPECTRUM GRAPHICS & UDG's • HIGH RESOLUTION SCREEN DUMPS • TWO COPY SIZES ON EPSON & COMPATIBLES**
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Now available! RGB INTERFACE **£45.00**

SPECTRUM 48K BUSINESS SOFTWARE

BUSINESS PACK. £14.95p
This suite of programs includes Sales Day Book, Purchase Day Book and Business Bank Account. These programs are being used by over 1000 companies to produce VAT and annual accounts; the Purchase and Bank Account programs allow for analyses under 17 subheadings. The Sales programs produce statements of outstanding invoices. Both Sales and Purchase programs calculate VAT.

INVOICING. £15.00p
This program will print out invoices, calculates discounts and VAT. The program will calculate totals from unit prices. Up to 50 accounts with 250 outstanding invoices.

SALES/PURCHASE LEDGER INVOICING £25.00p
This program is for use on microdrive or Opus Disc only. The program will print an invoice using a built-in price list and post the invoice to your customer's account. Will also print price list, statements, labels, etc.

WORDPROCESSING

TASWORD THREE by Tasman £16.90p
This new version of Tasword is supplied on microdrive with the following features: 128 column print out, tabs, page footers, buffered typing, page headers, full insert mode, bulit mail merge.

TASPRINT by Tasman Software £9.90p
Use this program with Tasword Three to produce 5 different fonts on a dot matrix printer.

SPREAD SHEET

OMNICALC 2 by Microsphere £14.95p
This is the long-awaited micro-drive version of omnicalc complete with histograms and many other features.

STOCK CONTROL

STOCK CONTROL. £10.95p
Handles 900 lines, including details of supplier. Program has full search facilities enabling you to search and update all lines from one supplier.

DATABASES

MASTERFILE by Campbell Systems £14.95p
This is one of the best database programs available for the ZX Spectrum. This program has many uses in a small business.

SUPERFILE. £14.95p
This is a new database program that stores pages of text 64 columns x 22 rows. The program includes word processing and full search facilities.

V-NOTCH. £12.95p
Index and Catalogue System, for collections of photographs, recipes, books, knitting patterns, stamps, etc. Up to 3500 items per file full search facilities.

BUSINESS GRAPHICS

HISTO-GRAPH. £10.95p
This program will enable you to present figures in histograms or pie charts. Displays 3 years as a direct comparison or 5 years to show a trend. A unique feature of this program is that all the figures can be printed with the histogram.

UTILITIES

DLAN by Campbell Systems £7.95p
Use your Spectrum to sell your products. Dlan will display messages in up to 11 different typefaces. Will scroll text in any direction.

TASWIDE by Tasman Software £5.50p
You can use this program within your other programs to display 64 columns on screen.

MF-PRINT by Campbell Systems £6.95p
Enables you to set a print format for your full-size printer within masterfile. Supplied complete with masterfile for **£19.95**.

TASMERGE by Tasman Software £10.95p
Allows you to transfer data from Masterfile into Tasword enabling you to use Tasword for mail merge. The program allows you to specify line and column of each field. For use on micro-drive only.

TRANSEXPRESS by Romantic Robot £9.95p
Micro-drive utility program which will enable you to back-up all your micro-drive cartridges.

TASCOPY by Tasman Software £9.90p
This program allows you to produce 3 sizes of screen copy using Interface 1.

New
SUPADRIVE £9.95
This program supplied on microdrive allows you to format a cartridge on the spectrum with 100-105K, retrieve corrupted files or print a full catalogue showing addresses and start lines.

ACCESSORIES

Microdrive storage boxes	£4.95p
RS 232 lead	£11.50p
Monichrome monitor connector	£11.50p
RGB monitor connector	£45.00p
Centronics interface	£44.90p
3½" floppy discs	£4.81p
Continuous Paper 2000 sheets	£12.98p
Continuous labels 1000	£6.65p

Add £1.00 post for labels. £3.00 post for paper.

MICRODRIVE CARTRIDGES

Blank microdrive cartridges	£1.99p
Microdrive storage box with 10 cartridges	£22.45p
Microdrive storage box with 20 cartridges	£39.95p

MONITORS



Phillips 7502

	Ex VAT	Inc VAT
Philips 7502 monochrome	£75.00p	£86.25p
Philips 8533 RGB + C/V	£250.00p	£287.50p
Spectrum monitor lead	£10.00p	£11.50p
Spectrum RGB interface	£39.13p	£45.00p

PRINTERS

Dot Matrix		
Seikosha SP1000 RS232	£150.00p	£172.50p
Seikosha SP1000 Centronis	£179.00p	£205.85p
Brother M1109	£185.00p	£212.75p
Epson LX86	£215.00p	£247.25p
Taxan Kaga	£250.00p	£287.50p
Epson FX85	£368.00p	£423.20p
DAISY WHEEL		
Silver Reed EXP 400	£215.00p	£247.25p
Brother HR15XL	£430.43p	£495.00p
Delivery of monitors & printers		£5.75p

DISC-DRIVES

Discovery 1 by Opus 180k	£115.00p
Discovery 2 by Opus 360k	£199.00p

OPUS DISCOVERY SOFTWARE

Business Pack	£17.95p
Sales/Purchase Ledger Invoicing	£25.00p
Tasword Three	£19.50p
Stock Control	£13.95p
Omnicalc 2	£21.90p
Masterfile+MFprint	£22.95p
Superfile	£14.95p
V-Notch	£12.95p
Histo-graph	£14.95p
Dlan	£10.95p
Transexpress	£14.95p
Tascopy	£12.90p

All programs supplied on 3 1/2" discs.

DISCS

10 x 3 1/2" blank discs	£27.00p
Box to hold 12 discs	£5.50p

Access

TRANSFORM LTD (DEPT. SU10) 01-658 6350
Mail order only. 24 West Oak, Beckenham, Kent. BR3 2EZ

VISA

Forest of the Long Shadows

Just one program this month — by M. Page. It's a very neat role-playing graphic adventure.

It's a game for one to four players and unlike a text adventure, typing it in won't give you many clues on how to win. Like most role-playing adventures it's also different each time you play — your character changes as does the layout of the forest maze.

Your quest is to venture in the Forest of the Long Shadows to find and visit the Four Castles of the Dark and return unscathed to thef safety and comfort of the Jolly Aardvark Inn. On your travels you will meet many other travellers and forest dwellers — some friendly, most not. And you will have to fight to survive.

As you would expect, being a role-playing game, you and the individuals you meet each have certain characterists — in true *D&D* style. Each time you play your attributes will be different so each game presents a different challenge.

- Strength rating gives you power to fight battles.
- Endurance rating tells you how much damage you can sustain before you give up living.
- Personality determines whether you make friends easily or not.

The other creatures you encounter each have their own strengths and weaknesses and by comparing your strengths with theirs you'll have to decide whether to run or fight.

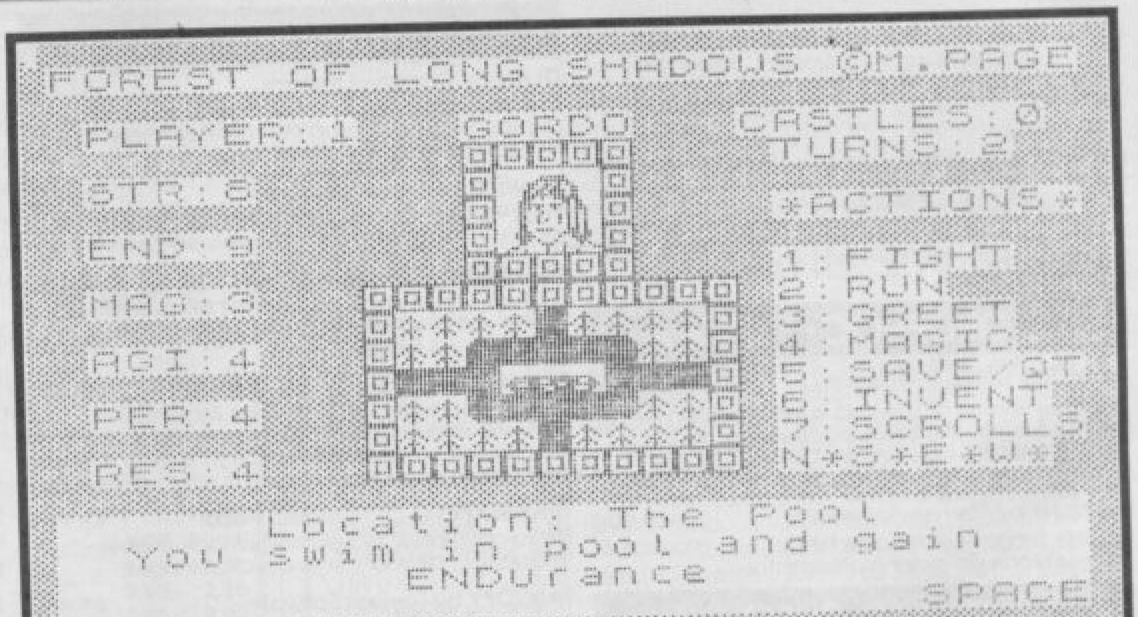
Just in case you make the wrong choice at the start you are given four resurrection spells so you can afford to be killed four times. Unfortunately, if you are killed you will be brought back to life elsewhere in the forest, which is very irritating if you were just about to visit one of the Castles when you are killed.

You will discover many different hazards in this program, bad weather, monsters, knights (including the particularly nasty Black Knight), objects, and certain special locations. more than that, I will not divulge.

The screen display shows your current position in the forest, a little picture of your character in the middle of the screen, together with any other characters present (although all the players look the same they do have different colour backgrounds), your attributes — strengths and so on — and it has a very nice border on the outside.

Playing notes:

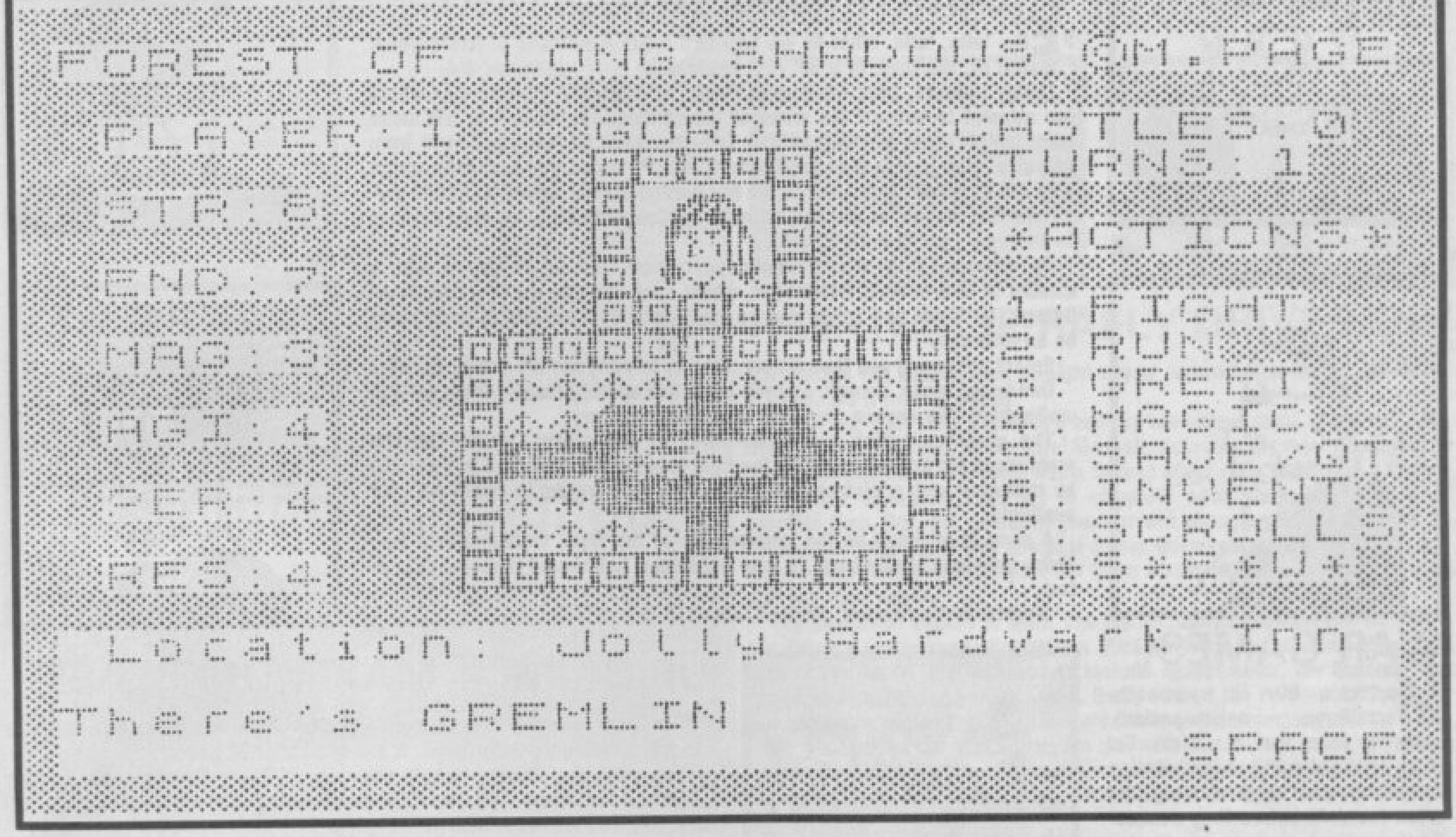
- If you get the message — 'The path is blocked' whilst moving, it means there isn't a corresponding path in the adjacent location.
- A flashing *Space* in the corner of the message window means press space to continue after you have read the message.
- Make a map of your explorations. You'll need plenty of paper as the game layout changes every time you play.




```
   1 CLEAR 52048: BORDER 0: PAPE
R 0: INK 7: CLS : PRINT "PLEASE
WAIT ABOUT 40 SECONDS    WHILE I
 SET UP THE BOARD"
   2 REM M.PAGE 1986. N.B. Whe
n keying in listing, do NOT ente
r letters such as "A" & "B" in g
raphics mode.
   3 RANDOMIZE : LET A=0: LET B=
1: LET C=2: LET D=3: LET E=4: LE
T F=5: LET G=6: LET H=7: LET J=8
: LET K=9: LET M=10
   4 LET MON=A: LET T=255: LET A
1=11: LET A2=12: LET A3=13: LET
A4=14: LET A5=15: LET A6=16: LET
 A7=17: LET A8=18: LET A9=19: LE
T A0=20: LET TN=A: LET PW=A
   5 POKE 23609,M: POKE 23658,J:
 LET Z1=23606: LET Z2=23607: LET
 B2=22: DEF FN P()=INT (RND*D):
DEF FN Q()=INT (RND*G): LET PL=2
010
  10 LET F$="You must miss a tur
n": LET D$="
            ": LET E$="AAAA"
  15 DIM C$(81,G): DIM L$(26,23)
: DIM M$(81,24): DIM O$(A0,23)
  50 FOR N=B TO 81: READ C$(N):
NEXT N
  52 FOR N=B TO 26: READ L$(N):
NEXT N
  56 FOR N=B TO 81: READ M$(N):
NEXT N
  58 FOR N=B TO A0: READ O$(N):
NEXT N
  80 FOR N=52049 TO 52392: READ
V: POKE N,V: NEXT N
 100 FOR I=B TO C
 105 FOR N=B TO 100: LET R1=INT
(RND*81+B): LET R2=INT (RND*81+B
)
 110 IF I=B THEN  LET A$=C$(R1):
 LET C$(R1)=C$(R2): LET C$(R2)=A
$
 115 IF I=C THEN  LET A$=M$(R1):
 LET M$(R1)=M$(R2): LET M$(R2)=A
$
 120 NEXT N
 125 NEXT I
 130 FOR N=B TO 81: IF C$(N,F TO
 G)="01" THEN  LET X=N: GO TO 14
0
 135 NEXT N
 140 FOR N=B TO K: LET C$(N,B)="
0": NEXT N
 145 FOR N=73 TO 81: LET C$(N,C)
="0": NEXT N
 150 FOR N=B TO 73 STEP K: LET C
$(N,E)="0": NEXT N
 155 FOR N=K TO 81 STEP K: LET C
$(N,D)="0": NEXT N
 160 IF M$(X,B)=" " THEN  GO TO
170
 162 FOR N=B TO 81
 164 IF M$(N,B)=" " AND N<>X THE
N  LET M$(N)=M$(X): LET M$(X)=""
: GO TO 170
 166 NEXT N
 170 BEEP .1,A0: CLS : PRINT "DO
 YOU WANT INSTRUCTIONS (Y/N)?"
 172 LET I$=INKEY$
 174 IF I$="" THEN  GO TO 172
 176 IF I$="N" THEN  CLS : GO TO
 200
 179 IF I$="Y" THEN  GO TO 7000
 180 GO TO 172
 200 PRINT : PRINT "HOW MANY PLA
YERS (1-4)?"
 201 LET I$=INKEY$
 202 IF I$="" THEN  GO TO 201
 203 IF (CODE I$<49) OR (CODE I$
>52) THEN  GO TO 201
 204 LET R=VAL I$: BEEP .1,30
 205 DIM L(R,42): DIM N$(R,J)
 206 GO SUB 589: BEEP .1,H
 207 PRINT : PRINT "ENTER PLAYER
S' NAMES (MAXIMUM   8 LETTERS):"
 208 FOR N=B TO R
 210 INPUT  LINE A$
 211 IF LEN A$>J OR A$="" THEN
PRINT "NAME WRONG LENGTH!": GO T
O 210
 212 IF A$(LEN A$)=CHR$ 32 THEN
 GO TO 210
 213 PRINT A$: BEEP .1,1: LET N$
(N)=A$
 215 NEXT N
 220 FOR N=B TO R
 221 LET L(N,B)=FN P()+G: LET L(
N,C)=FN P()+G: LET L(N,D)=FN P()
+C: LET L(N,E)=FN P()+C: LET L(N
,F)=FN P()+C: LET L(N,G)=E: LET
L(N,H)=X: LET L(N,42)=L(N,C)
 222 NEXT N
 230 PAPER H: BRIGHT B: CLS : IN
K B: FOR N=A TO 21: GO SUB 500:
PRINT  INK A; PAPER F; BRIGHT B;
AT N,A;"AAAAAAAAAAAAAAAAAAAAAAAA
```

```
AAAAAAAA": NEXT N: GO SUB 510
 235 PRINT  INK G; BRIGHT B; PAP
ER C;AT B,B;"FOREST OF LONG SHAD
OWSM.PAGE"
 240 PRINT  INK H; BRIGHT B; PAP
ER B;AT D,C;"PLAYER:";AT D,21;"C
ASTLES:";AT E,B2;"TURNS:"
 245 PRINT  INK A; PAPER F;AT F,
C;"STR:";AT H,C;"END:";AT K,C;"M
AG:";AT A1,C;"AGI:";AT A3,C;"PER
:";AT A5,C;"RES:"
 250 PRINT  INK B; BRIGHT B; PAP
ER F;AT G,B2;"*ACTIONS*";AT J,B2
;"1:FIGHT";AT K,B2;"2:RUN";AT M,
B2;"3:GREET";AT A1,B2;"4:MAGIC";
AT A2,B2;"5:SAVE/QT";AT A3,B2;"6
:INVENT";AT A4,B2;"7:SCROLLS";AT
 A5,B2;"N*S*E*W*"
 255 GO SUB 500: PRINT  INK A; P
APER H;AT E,A3;"HHHHH";AT F,A3;"
HIJKH";AT G,A3;"HLMNH";AT H,A3;"
HOPQH";AT J,A3;"HHHHH"
 260 PRINT  INK A; PAPER H;AT K,
M;"HHHHHHHHHHH";AT A5,M;"HHHHHHH
HHHH"
 265 FOR N=M TO A4: PRINT  INK A
; PAPER H;AT N,M;"H";AT N,A0;"H"
: NEXT N: GO SUB 510: GO SUB 520
: GO SUB 525
 499 GO TO 1000
 500 POKE Z1,25: POKE Z2,202: RE
TURN
 505 POKE Z1,73: POKE Z2,201: RE
TURN
 510 POKE Z1,A: POKE Z2,60: RETU
RN
 515 LET N=LEN A$: LET N=INT (32
-N)/C: RETURN
 520 GO SUB 500: FOR N=M TO A4:
PRINT  INK A; PAPER E;AT N,A1;"G
GGGGGGG": NEXT N: GO SUB 510: R
ETURN
 525 FOR N=A7 TO A0: PRINT AT N,
B;D$: NEXT N: RETURN
 527 FOR N=A8 TO A0: PRINT AT N,
B;D$: NEXT N: RETURN
 530 FOR N=LEN Y$ TO B STEP -1:
 IF Y$(N)<>" " THEN  LET Y$=Y$( T
O N): RETURN
 532 NEXT N
 535 GO SUB 525: GO SUB 500: PRI
NT  INK H;AT A2,A5;"B"
 537 IF C$(X,B)="1" THEN  PRINT
 INK H;AT M,A5;"B";AT A1,A5;"B"
 539 IF C$(X,C)="1" THEN  PRINT
 INK H;AT A3,A5;"B";AT A4,A5;"B"
 541 IF C$(X,E)="1" THEN  PRINT
 INK H;AT A2,A1;"BBBB"
 543 IF C$(X,D)="1" THEN  PRINT
 INK H;AT A2,A6;"BBBB"
 544 LET N=VAL C$(X,F TO G): IF
N<23 THEN  PRINT  INK H; PAPER E
;AT A1,A3;"CBBBD";AT A2,A3;"BBBB
B";AT A3,A3;"EBBBF"
 545: IF N<A9 THEN  GO SUB 505:
PRINT  INK A; PAPER H;AT A2,A4;L
$(N,B TO D):
 546 GO SUB 510: LET Y$=L$(N,E T
O ): GO SUB 530: LET A$="Locatio
n: "+Y$: GO SUB 525: GO SUB 515:
 PRINT AT A7,N;A$
 549 RETURN
 550 LET I$=INKEY$
 551 IF I$="4" AND LP=2000 THEN
 GO TO 6150
 552 IF I$="5" AND LP=2000 THEN
 GO TO 6050
 553 IF I$="6" AND LP=2000 THEN
 GO TO 6100
 554 IF I$="7" AND LP=2000 THEN
 GO TO 6000
 555 IF I$="N" THEN  GO TO 570
 556 IF I$="S" THEN  GO TO 574
 557 IF I$="E" THEN  GO TO 578
 558 IF I$="W" THEN  GO TO 582
 559 IF I$="" THEN  GO TO 550
 561 GO TO 550
 570 IF C$(X,B)="0" THEN  GO TO
586
 571 IF C$(X-K,C)="0" THEN  LET
PY=B: GO TO 587
 572 LET X=X-K: GO SUB 588: RETU
RN
 574 IF C$(X,C)="0" THEN  GO TO
586
 575 IF C$(X+K,B)="0" THEN  LET
PY=C: GO TO 587
 576 LET X=X+K: GO SUB 588: RETU
RN
 578 IF C$(X,D)="0" THEN  GO TO
586
 579 IF C$(X+B,E)="0" THEN  LET
PY=D: GO TO 587
 580 LET X=X+B: GO SUB 588: RETU
RN
 582 IF C$(X,E)="0" THEN  GO TO
586
 583 IF C$(X-B,D)="0" THEN  LET
PY=E: GO TO 587
 584 LET X=X-B: GO SUB 588: RETU
RN
 586 GO SUB 527: PRINT AT A9,F;"
There's not a pathway!": BEEP B,
-20: GO TO LP
 587 GO SUB 527: PRINT AT A9,G;"
The path is blocked": LET RN=B:
BEEP .1,D: BEEP .1,A: GO TO 590
 588 GO SUB 520: GO SUB 535: RET
URN
 589 FOR N=B TO 150: NEXT N: RET
URN
 590 IF L(Z,24)=B THEN  LET L(Z,
J)=PY: LET PW=TN+C
 591 RETURN
 610 BEEP .008,A5: PRINT  INK B;
 FLASH B;AT A0,26;"SPACE"
 615 LET I$=INKEY$
 616 IF I$=" " THEN : BEEP .02,A
0: RETURN
 618 GO TO 615
 620 IF Y$(A3)<>"E" AND Y$(A3)<>
"O" THEN  LET P$=P$( TO LEN P$-C
)+" "
 622 RETURN
 630 LET L(QQ,G)=L(QQ,G)-B: LET
L(QQ,C)=L(QQ,42)+L(QQ,38)+L(QQ,3
9)+3*L(QQ,29): IF MON THEN  GO S
UB 900
 631 GO SUB 610: IF L(QQ,G)<A TH
EN  GO SUB 525: LET Y$=N$(QQ): G
O SUB 530: LET A$="You are dead
"+Y$: GO SUB 515: LET L(QQ,H)=A:
 GO SUB 515: PRINT AT A8,N;A$: B
EEP B,-25: GO SUB 610
 632 RETURN
 633 FOR N=B TO R: IF L(N,G)<>-1
 THEN  RETURN
 634 NEXT N
 636 GO SUB 525: PRINT AT A8,J;"
NO PLAYERS LEFT!": BEEP B,-30: P
RINT AT A0,H;"Another game (Y/N)
?": GO TO 9020
 650 LET RM=INT (RND*40+B): LET
L(QQ,H)=L(QQ,H)-RM: IF L(QQ,H)<B
 THEN  LET L(QQ,H)=RM*C+L(QQ,H)
 651 RETURN
 660 FOR N=A4 TO M STEP -1: PRIN
T  PAPER H;AT N,A1;"        ":
BEEP .05,N: NEXT N: RETURN
 670 LET SPELL=A: LET Y$=N$(QQ):
 GO SUB 530: LET A$=Y$+" do you
want to cast": GO SUB 515: PRINT
 AT A8,N;A$;AT A9,M;"magic (Y/N)
?"
 672 LET I$=INKEY$
 674 IF I$="" THEN  GO TO 672
 676 IF I$="Y" THEN  GO TO 682
 678 IF I$="N" THEN  RETURN
 680 GO TO 672
 682 GO SUB 527: PRINT AT A9,F;"
Which Scroll (5 to 7)?"
 684 LET I$=INKEY$
 686 IF I$="" THEN  GO TO 684
 688 IF (CODE I$<53) OR (CODE I$
>55) THEN  GO TO 684
 690 IF L(QQ,VAL I$+A0)=A THEN
GO SUB 527:: PRINT AT A9,H;"You
haven't got it!": BEEP B,-20: RE
TURN
 692 IF L(QQ,D)<D THEN  PRINT AT
 A9,E;"You haven't enough MAGic!
": BEEP B,-20: RETURN
 694 IF I$="5" THEN  LET SPELL=H
 696 IF I$="6" THEN  LET SPELL=E
 698 IF I$="7" THEN  LET SPELL=C
 700 GO SUB 527: PRINT AT A9,H;"
YOU CAST THE SPELL!": FOR N=B TO
 A5: BEEP .03,RND*H: NEXT N: LET
 L(QQ,D)=L(QQ,D)-D
 710 IF QQ=Z THEN  GO SUB 500: P
RINT  INK A; PAPER F; BRIGHT B;A
T K,G;E$: GO SUB 510: PRINT  INK
 A; PAPER F;AT K,G;L(QQ,D): RETU
RN
 715 IF QQ=QL THEN  PRINT AT A4,
A3;"  ": PRINT  INK D;AT A4,A3;L
(QQ,D)
 720 RETURN
 800 GO SUB 527: LET Y$=N$(QQ):
GO SUB 530: LET A$=Y$+" has been
 defeated!": GO SUB 515: PRINT A
T A8,N;A$: GO SUB 650: GO SUB 63
0: GO SUB 633: RETURN
 850 IF L(Z,C)<A THEN  LET L(Z,C
)=A
 855 RETURN
 860 IF L(QL,C)<A THEN  LET L(QL
,C)=A
 865 RETURN
 870 GO SUB 527: LET Y$=N$(QQ):
GO SUB 530: LET A$=Y$+" has been
 hit!": GO SUB 515: PRINT AT A8,
N;A$: GO SUB 610: RETURN
 880 GO SUB 527: PRINT AT A9,D;"
Press '1' to engage combat"
 881 LET I$=INKEY$
 882 IF I$="1" THEN  RETURN
 883 IF I$="" THEN  GO TO 881
 884 GO TO 881
 900 IF MEN<M THEN  LET M$(X,E)=
"0": LET M$(X,F)=STR$ MEN: LET M
ON=A: RETURN
 905 LET M$(X,E TO F)=STR$ MEN:
LET MON=A: RETURN
 1000 LET TN=TN+B: POKE 23658,J
 1001 FOR Z=B TO R
 1005 IF TN=PW THEN  LET L(Z,J)=A
 1015 IF L(Z,G)<A THEN  GO TO 201
5
 1016 FOR N=B TO H: BEEP .01,A0:
NEXT N: LET LP=2000
 1020 LET X=L(Z,H)
 1021 GO SUB 500: PRINT  INK A; P
APER D+Z; BRIGHT B;AT F,A4;"IJK"
;AT G,A4;"LMN";AT H,A4;"OPQ": GO
 SUB 510
 1025 PRINT  INK H; BRIGHT B; PAP
ER B;AT D,K;Z
 1030 GO SUB 500: PRINT  INK A; P
APER F; BRIGHT B;;AT D,A1;E$+E$:
 GO SUB 510
 1035 LET Y$=N$(Z): GO SUB 530: L
ET A$=Y$: GO SUB 515: PRINT AT D
,N-B;A$
 1037 GO SUB 9000: PRINT  INK H;
BRIGHT B; PAPER B;AT D,29;L(Z,41
);AT E,28;TN
 1040 FOR N=F TO A5 STEP C: GO SU
B 500: PRINT  INK A; PAPER F; BR
IGHT B;;AT N,G;"AAAA": NEXT N: G
O SUB 510
 1045 PRINT  INK A; PAPER F;AT F,
G;L(Z,B);AT H,G;L(Z,C);AT K,G;L(
Z,D);AT A1,G;L(Z,E);AT A3,G;L(Z,
F);AT A5,G;L(Z,G)
 1050 GO SUB 520: GO SUB 535: GO
SUB 9015
 1200 IF M$(X,B)="4" THEN  PRINT
```

```
AT A9,D;"There's a fog in this a
rea": GO TO 1240
1210 IF M$(X,B)="5" THEN  PRINT
AT 19,C;"There's a storm in this
 area": GO TO 1240
1220 IF M$(X,B)="6" THEN  PRINT
AT A9,B;"There's a typhoon in th
is area": GO TO 1240
1235 GO TO 1400
1240 PRINT AT A0,E;F$: GO SUB 61
0: LET M$(X)="": GO SUB 525: GO
TO PL
1400 IF M$(X,B)<>" " THEN  LET Y
$=M$(X): GO SUB 530: LET P$="You
 can see an ": GO SUB 620: LET A
$=P$+Y$(A3 TO ): GO SUB 515: PRI
NT AT A8,N;A$
1410 LET PJ=A9: LET PT=K: FOR I=
B TO R: IF L(I,H)=L(Z,H) AND I<>
Z THEN  LET Y$=N$(I): GO SUB 530
: PRINT AT A9,B;"There's ";AT PJ
,PT;N$(I): LET PT=PT+LEN Y$+B
1413 IF PT>23 THEN  LET PJ=A0: L
ET PT=M
1415 NEXT I
1425 IF M$(X,B)<>" " THEN  GO TO
 1500
1426 IF PT=K THEN  GO TO 1800
1430 GO SUB 610: GO SUB 527: PRI
NT AT A9,B;"Do you want to fight
 a player?"
1435 LET I$=INKEY$
1436 IF I$="" THEN  GO TO 1435
1440 IF I$="N" THEN  GO TO 2000
1442 IF I$="Y" THEN  GO SUB 525:
 GO TO 1444
1443 GO TO 1435
1444 PRINT AT A8,J;"Select Playe
r No."
1452 LET I$=INKEY$
1454 IF I$="" THEN  GO TO 1452
1456 IF (CODE I$<49) OR (CODE I$
>R+48) THEN  GO TO 1452
1462 LET QL=VAL I$: IF L(QL,H)<>
L(Z,H) OR QL=Z THEN  GO TO 1452
1465 GO TO 4500
1500 GO TO 4000
1800 FOR N=A1 TO A8
1805 IF VAL C$(X,F TO G)=N AND L
(Z,N-C)=A THEN  LET L(Z,N-C)=B:
LET FL=A: GO TO N*A0+1620
1810 NEXT N
1820 GO TO LP
1840 IF FN Q()>C THEN  PRINT AT
A8,B;"You get sucked into the sw
amp!": LET FL=B
1841 IF FL THEN  LET QQ=Z: GO SU
B 650: GO SUB 630: LET L(Z,G)=L(
QQ,G): LET L(Z,H)=L(QQ,H): GO SU
B 633: GO SUB 500: PRINT  INK A;
 PAPER F; BRIGHT B;AT H,G;E$:: G
O SUB 510: PRINT  INK A; PAPER F
;AT H,G;A: GO TO FL
1842 GO TO LP
1860 IF FN Q()>C THEN  PRINT AT
A8,B;"You get sucked into the wa
ter": LET FL=B: GO TO 1841
1862 GO TO LP
1880 IF FN Q()>C THEN  PRINT AT
A8,E;"You drink at the fountain"
;AT A9,K;"and gain MAGic": LET L
(Z,D)=L(Z,D)+C: PRINT  INK A; PA
PER F;AT K,G;L(Z,D): GO SUB 610:
 GO TO PL
1882 GO TO LP
1900 IF FN Q()>C THEN  PRINT AT
A8,D;"You are attacked by eagles
": LET FL=B: LET L(Z,C)=L(Z,C)-(
FN P()+B)
1901 IF FL AND L(Z,C)<B THEN  GO
 TO 1841
1902 IF FL THEN  GO SUB 500: PRI
NT  INK A; PAPER F; BRIGHT B;AT
H,G;E$: GO SUB 510: PRINT  INK A
; PAPER F;AT H,G;L(Z,C): GO SUB
610: GO TO PL
1903 GO TO LP
1920 IF FN Q()>C THEN  PRINT AT
A8,D;"You fall over in the dark"
: LET FL=B: LET L(Z,C)=L(Z,C)-C:
 GO TO 1901
1922 GO TO LP
1940 IF FN Q()>C THEN  PRINT AT
A8,d;"You pray to God for extra"
; AT A9,A2;"STRength": LET L(Z,B
)=L(Z,B)+B: PRINT  INK A; PAPER
F;AT F,G;L(Z,B): GO SUB 610: GO
TO PL
1942 GO TO LP
1960 IF FN Q()>C THEN  PRINT AT
A8,B;"You are blessed by the Bis
hop": LET L(Z,F)=L(Z,F)+B: PRINT
  INK A; PAPER F;AT A3,G;L(Z,F):
 GO SUB 610: GO TO PL
1962 GO TO LP
1980 IF FN Q()>C THEN  PRINT AT
A8,D;"You swim in pool and gain"
;AT A9,A1;"ENDurance": LET L(Z,C
)=L(Z,C)+C: LET L(Z,42)=L(Z,42)+
C: PRINT  INK A; PAPER F;AT H,G;
L(Z,C): GO SUB 610: GO TO PL
1982 GO TO LP
2000 GO SUB 610: GO SUB 527: PRI
NT AT A9,E;"PRESS N,S,E,W,4,5,6
or 7": GO SUB 550: LET L(Z,H)=X:
 GO SUB 610
2010 GO SUB 9000: GO SUB 9015
2015 NEXT Z: GO TO 1000
4000 GO SUB 610: LET LP=4000: GO
 SUB 527: PRINT AT A8,G;"Select
option 1 to 7"
4005 LET I$=INKEY$
4010 IF (CODE I$<49) OR (CODE I$
>55) THEN  GO TO 4005
4015 IF I$="" THEN  GO TO 4005
4020 IF I$="4" THEN  GO SUB 527:
 PRINT AT A8,C;"Select option '1
 for combat": GO TO LP
4030 IF I$="5" THEN  GO TO 6050
4035 IF I$="6" THEN  GO TO 6100
4040 IF I$="7" THEN  GO TO 6000
4045 IF I$="1" THEN  GO TO 4200
4050 IF I$="2" THEN  GO TO 4100
4055 IF I$="3" THEN  GO TO 4150
4100 LET LP=4140: LET RN=A: LET
RUN=L(Z,E)+FN Q()-F: IF RUN>=VAL
 M$(X,A2) THEN  GO TO 4140
4105 IF M$(X,B)="1" OR M$(X,B)="
2" THEN  GO SUB 527: GO SUB 4130
: GO TO 4200
4110 GO SUB 527: GO SUB 4130: GO
 TO PL
4120 PRINT AT A9,M;"You run away
!": LET L(Z,H)=X: GO SUB 610: GO
 TO PL
4130 PRINT AT A8,F;"You were uns
uccessful!": GO SUB 610: RETURN
4140 GO SUB 527: PRINT AT A8,H;"
Select N,S,E or W": GO SUB 550
4142 IF RN=B THEN  GO SUB 610: G
O TO 4105
4145 GO TO 4120
4150 LET GR=A: GO SUB 527: LET G
REET=FN Q()+C+L(Z,F): IF GREET>=
VAL M$(X,G TO H) THEN  LET GR=B
4155 IF GR=B AND M$(X,B)="3" THE
N  PRINT AT A8,B;"You win the de
nizen's favour!";AT A9,C;"The de
nizen gives you:": GO SUB 4195:
GO TO PL
4160 IF GR=B THEN  GO SUB 4190:
GO TO PL
4165 IF GR=A AND M$(X,B)="3" THE
N  GO SUB 4190: GO TO PL
4170 IF GR=A THEN  PRINT AT A8,C
;"He's not interested in your";A
T A9,M;"friendship!": GO SUB 610
: GO TO 4200
4190 PRINT AT A8,B;"The denizen
seems indifferent.": GO SUB 610:
 RETURN
4195 LET I=VAL M$(X,J TO K): PRI
NT AT A0,D;O$(I): LET AA=VAL M$(
X,M): LET L(Z,AA)=L(Z,AA)+VAL M$
(X,A1): LET L(Z,I+A0)=B: PRINT
INK A; PAPER F;AT AA*C+D,G;L(Z,A
A): LET M$(X)="": GO SUB 610: GO
 TO PL
4200 LET MON=B: GO SUB 525: LET
MST=VAL M$(X,C TO D): LET MEN=VA
L M$(X,E TO F): LET Y$=M$(X): GO
 SUB 530: LET A$=Y$(A3 TO ): GO
SUB 515: PRINT  INK C; INVERSE B
;AT A7,N-B;A$
4205 LET SP1=A: GO SUB 527: GO S
UB 660: PRINT  INK C; INVERSE B;
AT M,A2;"DENIZEN";AT A2,A3;"STR"
;MST;AT A4,A3;"END";MEN
4210 LET QQ=Z: GO SUB 670: LET S
P1=SPELL: LET L(Z,D)=L(QQ,D): GO
 SUB 610
4215 GO SUB 880
4220 LET ZZ=(FN Q()+SP1+L(Z,B))-
(FN Q()+MST): FOR N=B TO A5: BEE
P .01,RND*H: NEXT N
4225 IF ZZ<A THEN  LET L(Z,C)=L(
Z,C)+ZZ: GO SUB 850: GO SUB 500:
 PRINT  INK A; PAPER F; BRIGHT B
;AT H,G;E$: GO SUB 510: PRINT  I
NK A; PAPER F;AT H,G;L(Z,C)
4230 IF ZZ<A AND L(Z,C)=A THEN
LET QQ=Z: GO SUB 800: LET L(Z,G)
=L(QQ,G): LET L(Z,H)=L(QQ,H): GO
 TO PL
4235 IF ZZ<A AND L(Z,C)>A THEN
LET QQ=Z: GO SUB 870: GO TO 4215
4240 IF ZZ=A THEN  GO SUB 527: P
RINT AT A8,G;"No-one has been hi
t.": GO SUB 610: GO TO 4215
4245 IF ZZ>A THEN  LET MEN=MEN-Z
Z: IF MEN<A THEN  LET MEN=A
4250 PRINT AT A4,A6;"  ": PRINT
 INK C; INVERSE B;AT A4,A6;MEN
4255 IF MEN>A THEN  LET Y$=M$(X)
: GO SUB 530: GO SUB 527: LET A$
="The "+Y$(A3 TO ): GO SUB 515:
PRINT AT A8,N;A$;AT A9,M;"has be
en hit!": GO SUB 610: GO TO 4215
4260 IF MEN=A THEN  GO SUB 527:
PRINT AT A8,C;"You have killed t
he denizen!": GO SUB 610
4265 IF M$(X,B)="3" AND FN Q()>B
 THEN  PRINT AT A9,C;"You find o
n the body:": GO SUB 4195
4270 IF M$(X,B)="2" THEN  GO SUB
 527: PRINT AT A8,B;"You gain 2
PERsonality points.": LET L(Z,F)
=L(Z,F)+C: GO SUB 500: PRINT  IN
K A; PAPER F; BRIGHT B;AT A3,G;E
$: GO SUB 510: PRINT  INK A; PAP
ER F;AT A3,G;L(Z,F): GO SUB 610'
4275 LET M$(X)="": GO TO PL
4500 LET SP1=A: LET SP2=A: GO SU
B 527: GO SUB 660: LET Y$=N$(QL)
: GO SUB 530: LET A$=Y$: GO SUB
515: PRINT  INK B; INVERSE B;AT
M,N-B;A$
4505 PRINT  INK D;AT A2,A1;"ST";
L(QL,B);TAB A6;"AG";L(QL,E);AT A
3,A1;"EN";L(QL,C);TAB A6;"PE";L(
QL,F);AT A4,A1;"MA";L(QL,D);TAB
A6;"RE";L(QL,G)
4510 LET QQ=Z: GO SUB 670: LET S
P1=SPELL: LET L(Z,D)=L(QQ,D): GO
 SUB 610: GO SUB 527: LET QQ=QL:
 GO SUB 670: LET SP2=SPELL: LET
L(QL,D)=L(QQ,D): GO SUB 610
4515 GO SUB 880
4520 LET ZZ=(FN Q()+SP1+L(Z,B))-
(FN Q()+SP2+L(QL,B)): FOR N=B TO
 A5: BEEP .01,RND*H: NEXT N
4525 IF ZZ<A THEN  LET L(Z,C)=L(
Z,C)+ZZ: GO SUB 850: GO SUB 500:
 PRINT  INK A; PAPER F; BRIGHT B
;AT H,G;E$: GO SUB 510: PRINT  I
NK A; PAPER F;AT H,G;L(Z,C)
4530 IF ZZ<A AND L(Z,C)=A THEN
LET QQ=Z: GO SUB 800: LET L(Z,G)
=L(QQ,G): LET L(Z,H)=L(QQ,H): GO
 TO PL
4535 IF ZZ<A AND L(Z,C)>A THEN
LET QQ=Z: GO SUB 870: GO TO 4515
4540 IF ZZ=A THEN  GO SUB 527: P
RINT AT A8,G;"No-one has been hi
t.": GO SUB 610: GO TO 4515
4545 IF ZZ>A THEN  LET L(QL,C)=L
(QL,C)-ZZ: GO SUB 860: PRINT AT
A3,A3;"  ": PRINT  INK D;AT A3,A
3;L(QL,C)
4550 IF ZZ>A AND L(QL,C)=A THEN
 LET QQ=QL: GO SUB 800: LET L(QL
,G)=L(QQ,G): LET L(QL,H)=L(QQ,H)
: GO TO PL
4555 IF ZZ>A AND L(QL,C)>A THEN
 LET QQ=QL: GO SUB 870: GO TO 45
15
5000 DATA "111019","110120","101
121","011122","111101","111119",
"111024","110125","101126","1111
02"
5001 DATA "011123","111124","111
020","110121","111103","101122",
"011119","111120","111025","1111
04"
5002 DATA "110126","101123","011
124","111125","111105","111021",
"110122","111106","101119","0111
20"
5003 DATA "111107","111121","111
022","110119","111100","011120",
"111121","111026","110123","1111
09"
5004 DATA "101124","111110","011
125","111022","110119","111111",
"101120","011121","111112","1111
22"
5005 DATA "111119","111120","111
113","111021","110122","101119",
"111114","011120","111121","1111
22"
5006 DATA "110119","111115","101
120","011121","111122","111026",
"111116","110123","101124","0111
25"
5007 DATA "111126","111117","111
019","101123","110120","101121",
"111118","011122","111119","1111
20","111121"
5100  DATA "ABCJolly Aardvark In
n","DEDCraigmoor Castle","DEDNil
grack Castle","DEDKandos Castle"
,"DEDSorbozon Castle","FGFCity o
f Sunset"
5102 DATA "HHHTown of Khadash","
ICCVillage of Hightree","ICCVill
age of Lowmarsh","ICCVillage of
Deathmeet","JJJThe Swamp","KLMTh
e Lake","NOPThe Fountain","QQQTh
e Ruins","RSTThe Cavern","UVWThe
 Church","XYZThe Abbey","KLMThe
Pool"
5104 DATA "000A lonely glade","0
00An open clearing","000A sinist
er glade","000A forest clearing"
,"000Twisting pathways","000Fore
st paths","000Shady pathways","0
00Desolate pathways"
5300 DATA "1121212000005Giant",""
,"31212090813BWhite Knight","","
215152000007Balrog","","31210100
9237Black Knight","","1060811000
030rc",""
5305 DATA "31009081032 6Elf","","
4","","105050900002Goblin","","3
09090911322Dwarf","","2162010000
09Dragon",""
5310 DATA "30404071241 0Hobbit","
","5","","110081300006Manticore"
,"","31311071342 9Ranger","","212
129900008Demon",""
5315 DATA "311070707333Wizard","
","105049900000Zombie","","30806
0914524Thief","","305060601343Ma
gic User","","110101500005Troll"
,""
5320 DATA "307060615612Hermit","
","100061000003Gargoyle","","310
061004342Witch","","11313990000
Golem","","308080905343Sorcerer"
,""
5325 DATA "6","106049900001Skele
ton","10505100000 4Wolf","","3070
50016511Priest","","100071000001
Lizard Man","","309080717333Monk
",""
5330 DATA "109101500002Werewolf"
,"","310080806333Magician","","1
12129900000Yeti","","31313061821
7Paladin","","300080803333Cleric
",""
5335 DATA "214129900007Wraith","
","311100719216Warrior","","2111
09900005Wight","","304060520120M
erchant","","104049900001Giant S
pider","","307070702333Spellmake
r"
5450 DATA "1:Scroll (+1 RES)","2
:Scroll (+2 AGI)","3:Scroll (+2
PER)","4:Scroll (Change Paths)",
"5:Scroll (Fireball)","6:Scroll
(Invisibility)","7:Scroll (Fear)
"
5455 DATA "Sword (+3 STR)","Armo
ur (+3 END)","Amulet (+2 MAG)","
Staff (+2 MAG)","Dust (+1 AGI)",
"Boots (+2 AGI)"
5460 DATA "Ring (+2 PER)","Potio
n (+1 RES)","Holy Water (+1 PER)
","Armband (+3 MAG)","Helmet (+1
 END)","Shield (+1 END)","Gauntl
ets (+2 STR)"
5500 DATA J,63,127,192,T,79,73,1
21,A,192,224,62,246,32,32,224
5502 DATA A,A,A,A,A,66,T,66,165,
T,T,189,189,189,231,231
5504 DATA A,A,A,165,T,219,219,T,
A6,56,124,254,124,84,124,124
5506 DATA A,A,A6,56,124,56,40,40
,A,24,60,126,T,90,126,126
5508 DATA 21,A2,A6,32,126,T,86,1
26,A,A,A,A6,146,84,56,T
5510 DATA A,A,A,31,63,115,63,31,
A,A,A,T,159,249,207,T
5512 DATA A,A,A,248,204,254,140,
248,A,A,A,31,32,64,32,31
5514 DATA 36,90,90,24,165,195,60
,T,A,A,A,248,E,C,E,248
5516 DATA A,32,32,32,104,105,237
,237,A,B,C,E,J,A6,32,127
5518 DATA 60,195,A,24,60,60,126,
T,A,128,64,32,A6,J,E,254
5520 DATA E,E,A4,27,27,31,59,59,
A,A,A,A,T,165,165,T
5522 DATA A,A,32,112,216,248,216
,216,A6,40,68,68,147,171,171,171
5524 DATA A,A7,58,A8,T,B,36,36,1
28,64,32,32,A6,144,144,144
5530 DATA 170,85,170,85,170,85,1
70,85,T,T,T,T,T,T,T,T
5532 DATA 63,127,T,T,T,T,T,T,252
,254,T,T,T,T,T,T
5534 DATA T,T,T,T,T,T,127,63,T,T
,T,T,T,T,254,252
5536 DATA A,A6,56,84,146,56,84,A
6,T,129,189,165,165,189,129,T
5538 DATA A,A,A,A,B,B,D,D,A,A,63
,127,218,182,111,T
5540 DATA A,A,A,128,192,96,96,96
,D,H,H,H,G,G,G,G
5542 DATA 167,B,238,68,32,66,82,
98,224,176,176,184,168,168,168,1
68
5544 DATA G,G,A5,A5,H,G,24,34,A,
120,B,130,68,57,A7,A7,168,232,23
6,124,56,A0,D,32
6000 GO SUB 527: PRINT AT A8,E;"
(1)Scroll(+1 RES):Adds 1";AT A9,
F;"point to RESurrection.": GO S
UB 610
6005 GO SUB 527: PRINT AT A8,E;"
(2)Scroll(+2 AGI):Adds 2";AT A9,
H;"points to AGIlity.": GO SUB 6
10
6010 GO SUB 527: PRINT AT A8,E;"
(3)Scroll(+2 PER):Adds 2";AT A9,
F;"points to PERsonality.": GO S
UB 610
6015 GO SUB 527: PRINT AT A8,B;"
(4)Scroll(Change paths):If a";AT
 A9,F;"pathway is blocked, the";
AT A0,B;"corresponding path (con
t)": GO SUB 610
6017 GO SUB 527: PRINT ;AT A8,C;
"can be opened in an adjacent";A
T A9,C;"location, providing you
cast";AT A0,C;"spell in followin
g turn.": GO SUB 610
6020 LET A$="A combat spell.": G
O SUB 527: PRINT AT A8,G;"(5)Scr
oll(Fireball):";AT A9,K;A$: GO S
UB 610
6030 GO SUB 527: PRINT AT A8,E;"
(6)Scroll(Invisibility):";AT A9,
K;A$: GO SUB 610
6035 GO SUB 527: PRINT AT A8,J;"
(7)Scroll(Fear):";AT A9,K;A$: GO
 SUB 610
6040 GO SUB 527: PRINT AT A8,B;"
ALL SPELLS COST 3 MAGIC POINTS";
AT A9,A2;"TO CAST.": GO TO LP
6050 GO SUB 527: PRINT AT A9,C;"
S)ave, N)ew Game, Quit G)ame";AT
 A0,M;"Quit P)layer"
6051 LET I$=INKEY$
```




```
6052 IF I$="" THEN  GO TO 6051
6053 IF I$="N" THEN  LET GB=A: G
O TO 6060
6054 IF I$="G" THEN  LET GB=C: G
O TO 6060
6055 IF I$="P" THEN  LET GB=B: G
O TO 6060
6056 IF I$="S" THEN  GO TO 6070
6058 GO TO 6051
6060 GO SUB 527: PRINT AT A9,K;"
ARE YOU SURE?"
6062 LET I$=INKEY$
6063 IF I$="Y" THEN  GO TO GB+60
66
6064 IF I$="N" THEN  GO TO LP
6065 GO TO 6062
6066 RUN
6067 LET QQ=Z: LET L(QQ,G)=-1: G
O SUB 631: GO SUB 633: GO TO PL
6068 STOP
6070 GO SUB 527: PRINT AT A8,B;"
This routine SAVEs the entire";A
T A9,B;"program. To LOAD the tap
e back";AT A0,B;"-type LOAD """"
CODE & ENTER": GO SUB 610: SAVE
"folsSAVE"CODE 16384,36009
6072 GO SUB 527: PRINT  FLASH B;
AT A9,A3;"SAVED": GO TO LP
6100 LET FG=A: GO SUB 527: PRINT
 AT A8,J;"You have:"
6105 FOR N=21 TO 40
6110 IF L(Z,N)=B THEN  PRINT AT
A9,J;D$(N-A0): FOR I=B TO 50: NE
XT I:: BEEP .05,M: LET FG=B: PRI
NT AT A9,B;D$
6115 NEXT N: IF FG THEN  GO SUB
527
6120 IF NOT FG THEN  PRINT AT A9
,A2;"NOTHING!": PAUSE 75
6125 GO TO LP
6150 GO SUB 527: PRINT AT A9,F;"
Which Scroll (1 to 7)?"
6152 FOR I=B TO 50: NEXT I
6155 LET I$=INKEY$
6160 IF I$="" THEN  GO TO 6155
6165 IF (CODE I$<49) OR (CODE I$
>55) THEN  GO TO 6155
6170 IF VAL I$>E THEN  GO SUB 52
7: PRINT AT A9,B;"That is for us
e in combat only": BEEP B,-20: G
O SUB 610: GO TO PL
6175 IF L(Z,VAL I$+A0)=A THEN  G
O SUB 527: PRINT AT A9,H;"You ha
ven't got it!": BEEP B,-20: GO S
UB 610: GO TO PL
6180 IF L(Z,D)<D THEN  GO SUB 52
7: PRINT AT A9,E;"You haven't en
ough MAGic!": BEEP B,-20: GO SUB
 610: GO TO PL
6190 GO SUB 527: PRINT AT A9,H;"
YOU CAST THE SPELL!": FOR N=B TO
 A5: BEEP .03,RND*H: NEXT N: LET
 L(Z,D)=L(Z,D)-D: GO SUB 500: PR
INT  INK A; PAPER F; BRIGHT B;AT
 K,G;E$: GO SUB 510: PRINT  INK
A; PAPER F;AT K,G;L(Z,D): GO TO
6180+VAL I$*A0
6200 LET L(Z,G)=L(Z,G)+B: PRINT
 INK A; PAPER F;AT A5,G;L(Z,G):
GO SUB 610: GO TO PL
6220 LET L(Z,E)=L(Z,E)+C: PRINT
 INK A; PAPER F;AT A1,G;L(Z,E):
GO SUB 610: GO TO PL
6240 LET L(Z,F)=L(Z,F)+C: PRINT
 INK A; PAPER F;AT A3,G;L(Z,F):
GO SUB 610: GO TO PL
6260 GO SUB 527: PRINT AT A9,D;"
Change paths (N,S,E or W)?"
6265 LET I$=INKEY$
6270 IF I$="" THEN  GO TO 6265
6275 IF I$="N" AND L(Z,J)=B THEN
  LET C$(X-K,C)="1": GO TO 6305
6280 IF I$="S" AND L(Z,J)=C THEN
  LET C$(X+K,B)="1": GO TO 6305
6285 IF I$="E" AND L(Z,J)=D THEN
  LET C$(X+B,E)="1": GO TO 6305
6290 IF I$="W" AND L(Z,J)=E THEN
  LET C$(X-B,D)="1": GO TO 6305
6295 IF I$="N" OR I$="S" OR I$="
E" OR I$="W" THEN  GO SUB 527: P
RINT AT A8,C;"Path not reported
blocked in";AT A9,K;"your last t
urn.": GO SUB 610: GO TO PL
6300 GO TO 6265
6305 PRINT AT A0,A2;"CHANGED!":
GO SUB 610: GO TO PL
7000 CLS : PRINT "INSTRUCTIONS":
 PRINT '"'Forest' is a role-play
ing game for 1 to 4 players that
 you can play again & again due
to a     different 'board' for e
ach game."
7005 PRINT '"The object is to pr
ove your     prowess by braving
the perils ofthe forest. All you
 have to do  is to visit the fou
r castles &  return to your star
ting place - The Jolly Aardvark
Inn!"
7010 PRINT '"You have 4 RESurrec
tion spells  cast upon you at th
e start of   the game, effective
ly giving you5 lives in total. Y
our other     attributes can be s
lightly       different each game
."
7015 GO SUB 7500
7020 PRINT "STRength decides pow
er in battle; ENDurance is the d
amage you    can take; MAGic is u
sed for      spell casting; AGIli
ty is for    running away from a
denizen;     PERsonality is for t
rying to     GREET a denizen & wi
nning their favour. All attribut
es can alterin the course of the
 game."
7025 PRINT '"Weather, monsters,
people,      objects & special l
ocations willall be encountered
in the game, it's up to you to d
iscover them!"
7030 PRINT '"Scrolls, numbered 1
 to 7 containspells which can be
 used for     various things - se
e option 7.": GO SUB 7500
7035 PRINT "N.B. If you get the
message -    'The path is blocked
' whilst     moving, it means the
re isn't a   corresponding path i
n the        adjacent location."
7040 PRINT '"A flashing SPACE in
 the corner  of the message wind
ow can be    pressed after the r
elevant      messages are read."
7042 PRINT '"If you are killed a
nd still haveRESurrection points
, you will beteleported to elsew
here in the  forest."
7045 PRINT '"It is strongly advi
sed that     players make a map
of their     explorations.": GO
SUB 7500: GO SUB 200
7500 PRINT  INK G; FLASH B;"SPAC
E TO CONTINUE & COPY?"
7505 LET I$=INKEY$
7510 IF I$=" " THEN  COPY : CLS
: BEEP .1,A0: RETURN
7512 IF I$="" THEN  GO TO 7505
7515 GO TO 7505
9000 LET N=VAL C$(X,F TO G)
9005 IF N<C OR N>F THEN  RETURN
9010 IF L(Z,N+A5)=A THEN  LET L(
Z,N+A5)=B: LET L(Z,41)=L(Z,41)+B
: PRINT  INK H; BRIGHT B; PAPER
B;AT D,29;L(Z,41)
9012 RETURN
9015 IF L(Z,41)=E AND VAL C$(X,F
 TO G)=B THEN  GO SUB 527: LET Y
$=N$(Z): GO SUB 530: LET A$="CON
GRATULATIONS "+Y$: GO SUB 515: P
RINT  FLASH B; INK C;AT A8,N;A$;
AT A9,F;"YOU HAVE WON THE GAME!"
: FOR N=B TO B2: BEEP .15,N: NEX
T N: PRINT AT A0,M;"ANOTHER GAME
?": GO TO 9020
9018 RETURN
9020 LET I$=INKEY$
9022 IF I$="" THEN  GO TO 9020
9023 IF I$="N" THEN  STOP
9025 IF I$="Y" THEN  RUN
9030 GO TO 9020
9999 CLEAR : SAVE "FOLSHAD" LINE
 1: BEEP 1,1: VERIFY ""
```

EIGHT DAYS A WEEK

It seems we had some problems in our August issue with Eight Days a Week.

Hear are the corrections:

Between the quotes in Line 1 should be a Graphic A.

The capital 'A's in Lines 100 and 120 should also be in Graphic mode.

The word Calendar in Line 30, *Enter* in Line 210 and Weekdays in Line 140 should all be inverse mode.

And finally, a line was missing: Here it is:

150 For Y=1 to 7: Print "AAA AA AA AA AA AA AA AAA": Next y: Print "AAAAAAAAAAAAAAAAAAAAAAAAAAAAA-AAAA": Let ma=ma+1: Next x

(Note: all capital A's in Line 150 are in Graphics mode.)





DODGY GEEZERS ARE GO

'Ello, 'ello, 'ello. What do we 'ave 'ere then? A suitcase of fivers which fell off the back of a lorry? A likely story young fella me' lad.

Dodgy Geezers, from Melbourne House, is a graphic adventure in which you attempt to pull off the crime of the century. It's written by the same team which wrote Hampstead and Terrormolinos. Recently released from jail, after your part in the Long Ditton Spaghetti Caper, you have returned to your life of crime. Your spell inside has hardened your determination to pull off one last big job, so you can retire to the Costa del Sol — or even Panama — to enjoy your ill-gotten gains.

On returning to your old haunts, you renew your acquaintance with a number of like-minded felons. But, which ones can you trust? Bullet Proof George, Mr Video and Soapy may be useful partners, but one of them could be an informer.

Select your gang and then it only remains to carry out the crime. Simple. One wrong move, though, and you could end up back inside, or worse. The mafia don't like anyone muscling in on their territory.

The graphics, which cover two-thirds of the screen, appear as you progress in the adventure. Make the right move at the right time and you will be rewarded with a picture. Mug shots of your partners in crime are also available.

A song is included on the reverse side of the tape. Listening to it may cause grevious bodily harm to your eardrums, but should reveal a clue or two.

Streetdate: September. Price: £7.95.





WAR GAMES!

Martech's *War* is a smooth-scrolling, action-packed, game for shoot 'em up addicts. Set in an artificial world of five rotating cylinders, you must destroy the alien invaders before they conquer Earth.

Each cylinder is protected by a sophisticated missile system and waves of roving Droidan patrols. Cities, fields, factories, power stations and military bases are spread throughout the cylinders. Do as much damage as possible in each cylinder before going on to the next. If you fail to wreak sufficient havoc quickly enough you find you're trapped in the cylinder, at the mercy of the Droids. Not a good thing.

The cylinders vary — some are residential, some are military. As you progress through the game, you find they become more difficult to negotiate, but, your firepower options also increase.

Fast reflexes, good hand/eye coordination and a penchant for zapping aliens are the keys to success. Start flexing your fingers.

Streetdate: September 8. Price: £7.95



It's sequal time. Hard on the knuckes of The Way of the Tiger is Avenger — The Way of the Tiger II.

It's a martial arts arcade adventure looking a little like Guantiet in places — doesn't everything.

In Tiger you had to prove yourself a Ninja warrior — now you must use your fighting skills to avenge the death of your foster father Naijishi.

Lots of enemies to overcome, but the god Kwon will give you a helping hand if you are in dire straits.

Streetdate: November 24. Price: £9.95.

URIDIUM — MAXIMUM BLAST

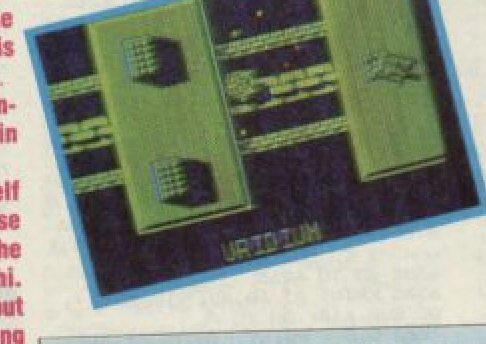
The Spectrum version of Hewson's *Urdium* looks like being as popular as the Commodore 64 original. A zap or be zapped game.

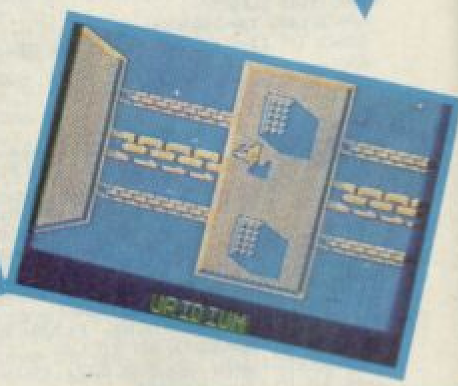
You control a Manta fighter attacking a Super Dreadnought. Destroy waves of defending fighters, while manoeuvring,your craft round obstacles and look out for the mines.

The Manta fighter in the picture is screeching across a Dreadnought. The two meteor shields on the left are fixed obstacles, as is the radar aerial on the right. The links in the middle hold the Dreadnought together.

If you find yourself in a tight squeeze, you can turn the Manta fighter on its side. Like the 64 version, the fighter and the other graphics are sharp and fast.

Streetdate: October 28. Price: £8.95.





ALL THIS AND FIST TOO

Way of the Exploding Fist, Melbourne House's kung fu spectacular, launched the craze for martial arts 'fighting' games.

With imitations even now still being released, Melbourne House is ready with its eagerly awaited follow-up — Fist II: The Legend Continues.

This time you hone your martial skills to defeat the evil warlord in his volcano fortress. He's guarded by an array of ninjas, shoguns, warriors and soldiers. There are also natural hazards to overcome including panthers and cobras.

How is it better than Fist I? More assailants and more weapons, is the answer.

With more than 700 sprites and over 100 different screens, the world of Fist II is considerably larger than its predecessor. Your opponents are also less honourable than before — none of this ending a contest just because you have landed a good blow. All the bowing has gone — chivalry is dead.

A number of your enemies may use fighting implements or throwing weapons, such as stars. Some opponents will be hidden, lying in wait before jumping out and attacking you. Physical objects, such as walls and rocks may also block your path, but can be smashed with the right blow.

The heart of the game still revolves around controlling your character and initiating sequences of drop kicks, short-arm punches and jabs. And — just as in Fist I — this becomes completely absorbing.

Streetdate: November. Price: £8.95.



PREVIEW

compiled by Brendon Gore

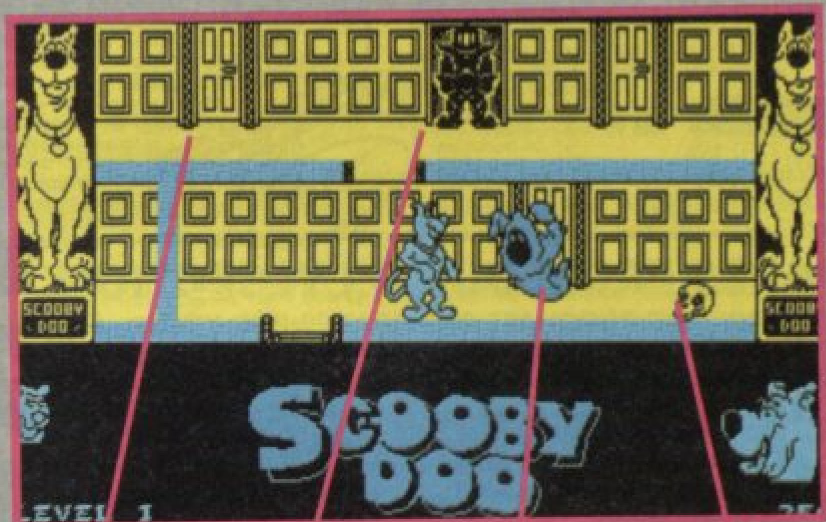
SCOOBY DOO WHERE ARE YOU?

Scooby Doo, of cartoon fame (Ssshkooby shnacks), is set to star in a multi-level arcade game. Out from Elite and written by Gargoyle.

The lovable tail-wagging, tongue-lolling Scooby has to rescue his four friends from the castle where they are being held prisoner. Assorted ghosts and ghoulies bar his way. But, Scooby can use his fists to batter them into submission. And I thought he was a passive pooch.

"I would have got away with it too, using a sheet to disguise myself as a ghost to frighten the people, if it hadn't been for your darn kids."

Streetdate: Christmas. Price: £7.95.



Doors hide a variety of ghosts, bats, ghouls, fish and mad monks ● Don't linger in front of them

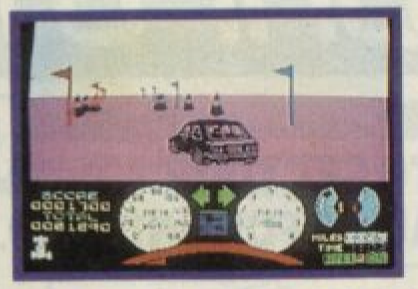
A suit of armour ● Looks threatening but is actually harmless ● Can safely be left alone

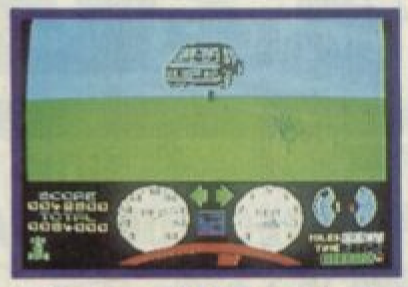
A skull ● Deadly if you land on it ● Scooby must jump over all skulls to stay alive

Ghosts come in two sizes — large and small ● All will chase Scooby, but some are faster than others

You play Scooby the cartoon dog ● You kill ghosts by hitting them with your paws ● And you can duck — necessary to avoid flying bats ● Jump over skulls and holes in the ground, unless you want to drop through to the floor below

There are between three and five floors on each level ● Climb up ladders to go up ● Fall through the gaps go down





NIGHTMARE RALLY DRIVES OFF

Hands on the wheel. Look straight ahead and put your foot to the floor. Yup, it's a driving game.

Nightmare Rally from Ocean is a one- or two-player game which will soon have you attempting to outdo Nigel Mansell. Actually, it's more like trying to beat Hanu Mikola — it's more like a tarmac stage rally. Driving in a variety of weather conditions, you try to complete each stage in the shortest possible time. But, the colour of your car will change each time you hit an obstacle or drive the wrong way past a flag. Once your car becomes red, one more colour change causes your car to be scrapped for being unroadworthy and you start again.

The on-screen display is split. The top two-thirds showing the view from the driver's windscreen, the bottom third showing the steering wheel and instrument panel. The instruments include speedometer, rev counter, fuel guage and engine temperature dial. Don't exceed the rev limit of 7,000 for too long — it'll result in a rapid increase in engine temperature.

Before each stage starts, you are given its distance in miles, a braking efficiency figure and a speed limit above which you are likely to skid. These figures change with each stage, depending on factores such as what the weather is like.

Points are gained for correctly negotiating each flag, for driving over cones, for driving through fuel dumps and for jumping or sumersaulting over hills. There are also two magical objects, a pulsating iris and a standing stone, which can cause some strange effects. I should think they do. In all the time I've been driving I've never seen anything like that sitting in the middle of the road!

Crashes and blowouts also provide some interesting (!) moments.

Streetdate: September. Price £7.95.

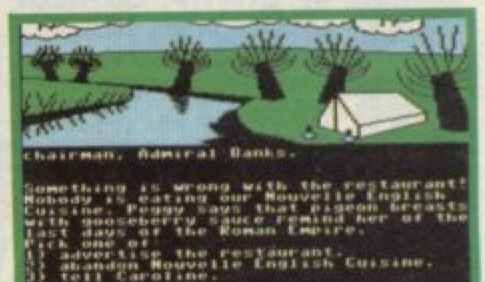
SOFTWARE TURNS TO THE SOAPS

Do you follow the soaps? Do you live your life through the lives of TV and radio folk? If yes, then you could be among the millions who tune in to The Archers every week.

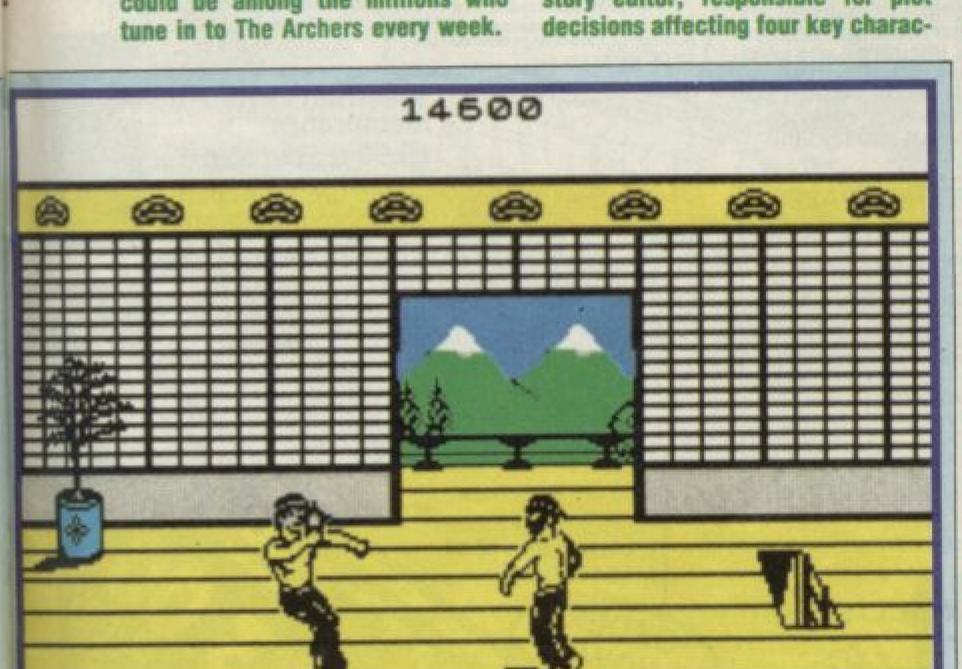
Mosaic, the bunch who brought you Adrian Mole, has now turned its attention to the village of Ambridge and its residents. Programmed by adventure aces Level 9, the graphic adventure has been developed with the help of scriptwriters from the radio show.

You take the role of The Archers' story editor, responsible for plot decisions affecting four key characters — Eddie Grundy, Jack Woolley, Nelson Gabriel and Elizabeth Archer. Like Mole you get multiple choice questions and you must decide which story lines to pursue.

Your success is measured by the listening figures. If your audience drops significantly, you are likely to receive caustic memos from the Controller of Radio 4. If your story lines prove popular and the ratings go up, you may even be congratulated. Maybe you'll even get to work a three-day week with hefty over-run payments and use of a subsidised canteen.



Streetdate: October. Price: £9.95.



IT'S A KNOCK OUT RIDES AGAIN

Ocean has a good few games being released over the next few weeks, including Highlander and The Great Escape (oh no — not *that*).

It is also releasing a TV tie-in — It's a Knockout.

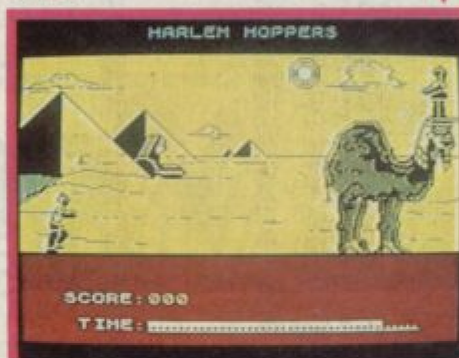
So, one way and another Ocean's really going for the stars with the devastating David Vine.

Devised with the help of the TV series producer, the game features six different scenarios including Bronte Bash, where you attack a brontesorous — which seems unfair — what did it ever do to you? — and Harlem Hoppers, which involves rolling a basketball down the back of a camel (I kid you not).

The games can be played by one to six people, each of whom chooses the role of one of the participating countries. Anyone want Belgium?

The game is really a type of multi-sport simulation, but with the emphasis on humour. Humour? Ocean must be joking.

Streetdate: September. Price: £7.95.





BEAM ME UP SCOTTY

Star Trek fever is running high, though Beyond are still tight lipped about its much-awaited biggie.

However, a few details are starting to leak. Starfleet Command is concerned to discover that a number of federation star ships appear to have rebelled. A quarantine zone has been established and the star ship Enterprise is sent in to investigate.

Set in a universe of 1000 stars, the Enterprise's mission (hopefully it won't take five years) is to find out what is turning the star ships into rogues and stop the mutiny from spreading further. As you would imagine, there are plenty of surprises along the way which will call for photon torpedos and phasors. Remember the Klingons?

All your favourite characters are there, Kirk, Spock, Bones, Sulu, Checkov and Uhuru. Many of the aliens will also be familiar to fans of the TV series.

With Mike Singleton's past record — Lords of Midnight and Doomdark's Revenge — the graphics should be stunning — but you may have to wait a while. Treat the streetdate with caution.

The digitised pictures of the crew certainly look good though. One for Trekies everywhere.

Streetdate: Christmas. Price: not released.

HARDBALL ON FIRST BASE

Simulations of American sports seem to be in vogue at the moment.

Hot on the heels of Addictive Games' Head Coach comes Hardball a baseball simulation converted from the C64.

A one- or two-player game, Hardball lets you pitch, strike and field, just as you would in the real thing. You can choose between fast, slow or side spin for the pitcher and select which base the fielder throws the ball to. Similarly, you can choose between a variety of swings for the better.

With Channel 4 due soo to cover the American baseball World Series, Advance must be hoping baseball will become as popular as American football over here.

Streetdate: October. Price: 8.95.



MAN-MACHINE

Cyborg — half man, half machine. Can he stop the alien menace and rescue the kidnapped scientists?

This new arcade adventure from CRL features a character familiar to those who saw Lee Majors in The Six Million Dollar Man. Stronger than a man, smarter and more adaptable than a robot, a cyborg is a synthesis of man and machine.

It's an icon driven game and Cyborg has to deal with a variety of alien nasties including The Walker, a minature robot spaceship with legs, The Assassin, and numerous trackers, guards and troopers.

You can design your own Cyborg too. You choose a number of different combinations of armour and weapons, depending on the nature of the alien menace confronting you.

This is not just a simple blast, though, you've also got to find and rescue the missing scientists.

Streetdate: November 28. Price: £8.95.





OWN GOAL

It had to happen. After Football Manager and its countless imitators, a game has finally been released which follows the fortunes of a player rather than a manager.

Footballer of the Year, from Gremlin, kicks off with you assuming the role of a 17-year-old footballer. Playing for a fourth division club, your aim is to play for a first division side. Scoring the winning goal in the FA Cup wouldn't go amiss either.

If you're successful enough in your playing career and the transfer market, you should be nominated for Footballer of the Year. Winning this award will be the peak of your career, so try not to get sent off as this will damage your reputation.

With the new football season just getting under way, the timing could be just right. A game for footie fans everywhere. Even me.

Streetdate: September 22. Price: £7.95.

CARTHAGE CARNAGE

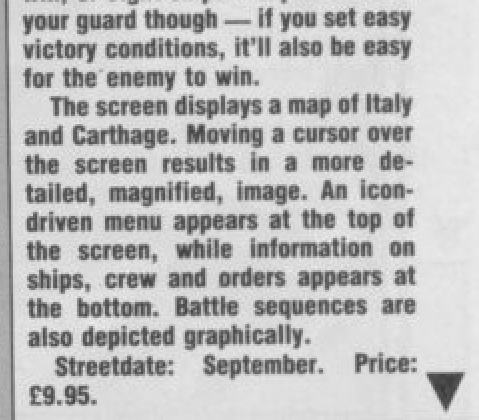
Legions of Death is a traditional sea-based war game set at the time of the Roman Empire. First, design your ships, deciding whether or not to use sails, galley slaves and towers. The sailors can be raw recruits or hardened crewmen.

When the design is complete, you can buy as many ships as you can afford. Then you place the ships stategically in your own ports, ready for the movement phase.

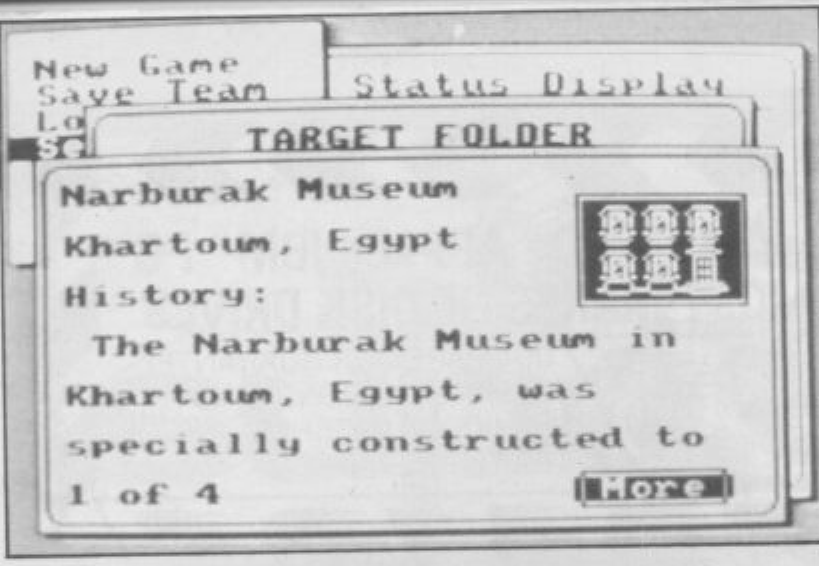
The aim is to sink as many of the enemy ships as you can while capturing their ports. A unique feature is the option of setting your own victory conditions, ie deciding whether you need to sink two ships and capture two ports in order to win, or eight ships and ports. Be on your guard though — if you set easy victory conditions, it'll also be easy for the enemy to win.

The screen displays a map of Italy and Carthage. Moving a cursor over the screen results in a more detailed, magnified, image. An icon-driven menu appears at the top of the screen, while information on ships, crew and orders appears at the bottom. Battle sequences are also depicted graphically.

Streetdate: September. Price: £9.95.



PREVIEW



▲

THEY STOLE A MILLION

They Stole a Million is a strategy/adventure game from 39 Steps, the new Ariolasoft adventure label.

Can you plan and execute the perfect crime? It's actually — despite the plot and title — a highly original and interesting program. Well worth waiting for.

There are five possible targets to rob, including a coin dealer and a bank. Some easy, some hard, according to the size of the haul and the difficulty of penetrating its defences.

First select your team of 'hoods' to carry out the robbery. Choose up to six from a pool of eighteen: each has a specialist skill such as safe cracker — so it pays to match your team to the crime.

Now you can put your criminal mastermind to work, planning the robbery. With the aid of blueprints for your prospective target, you must co-ordinate and time the different sections of the operation. You actually key in the movements and timings of actions for each of your team. If one action relies on those of another team member be careful to get the timings right or the alarm could be set off.

When you are satisfied with your preparations, press any key and watch the action.

It is possible to make minor changes during the arcade sequence of the job, but any major bungles are likely to set off an alarm and leave you sitting in clink.

But, if your criminal tendencies are sufficiently well developed, you'll get away scot free.

Who said crime doesn't pay?

Streetdate: November. Price: £8.95.

PSI-5 TRADING

US Gold is continuing its autumn campaign of new releases — which seems to be never ending.

Latest offering is Psi-5 Trading Co, a space-based game of trade and warfare.

The plot: A new planet, the Parvian Factor, is being blockaded by marauding pirates; its inhabitants will starve, unless someone can break through the blockade; and you are that someone.

Your first task is to select a crew of six from a pool of 30. Each crew member will be responsible for a specific function, such as weaponary, engineering and navigation.

Two screens provide communication with the crew and information about the situation outside. Additional information about the ship's status is provided below the two screens.



Succeed in piloting your ship through the blockade, and you'll be handsomely rewarded for your cargo.

Varying levels of difficulty make your task easier or harder, as preferred.

Streetdate: October 6. Price: £8.99.



BIG CHOLO

▲

Cholo is big. Well Firebird says it is anyway. Its a sort of Mercenary meets everything else.

It features 3D sector graphic and it is one of those third generation post holocaust games. You sit at your terminal in your radioactivity proof bunker and learn how to control a variety of droids that move about — topside — the planet's surface.

The display mixes 3D Elite-style views of the city with maps and status indicators — the works.

Firebird reckons it's going to be huge because its got a huge price.

Streetdate: before Christmas. Price: £14.95.

ADVENTURE IN SHREWSBURY

Shrewsbury Key is a graphic adventure from Players — the budget software arm from Interceptor. Your quest is to recover a diamond encrusted golden key hidden somewhere in Shrewsbury. Where? It's not quite deepest South America or the planet Zoob 4, is it?

This modern day adventure provides echoes of Melbourne House's Sherlock Holmes — you get to use public transport, trains and the like. Starting in York, first find Shrewsbury (not easy at the best of times) assuming you can scrape together the money to pay for your ticket. You may find the journey a trifle bumpy, but a relaxed attitude will soon solve this problem.

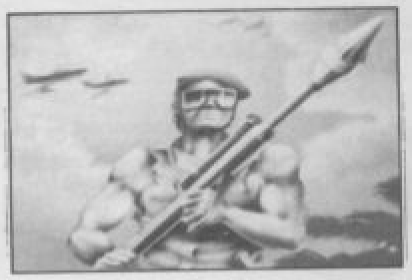
Clues are provided in a variety of guises, often in the form of reading matter of one kind or another. Commands are entered in the usual two word format, eg Get Money.

No goblins or trolls in this one.

Streetdate: September. Price: £1.99.

▼





BAZOOKA BILL

Bazooka Bill is the first result of a deal that gives Melbourne House rights to titles from Arcade Machine.

A fast reflex shoot 'em up, Bazooka Bill is a computerised Stallone type. Armed with a bazooka, missile bearing jet, flame thrower, machine gun and knives, Bill is a one man army. How he carries it all is a mystery that is never satisfactorily explained. Whatever, his mission is to dispose of as many enemy soldiers, tanks, trucks and fighters as possible. Lightening reactions are needed to deal with the enemy — as many as 15 attackers may appear simultaneously on any one screen. If all else fails, Bill can always rely on his fists.

There are over 100 mappable screens of differing terrain and your actions in controlling Bill determine which screen you encounter next.

Fast and furious. It'll be interesting to see which game is the bigger hit — Bazooka Bill or Elite's coin-op conversion of Ikari Warriors.

Streetdate: October 16. Price: £8.95.

GUY FAWKES

Plot. The aim of the game: to blow up the Houses of Parliament. Yup, it's Guy Fawkes time again.

It's an arcade game, from Odin, based around the historical gunpowder plot. Move from room to room, collecting the dynamite.

Streetdate: November. Price: £9.95.

NUCLEAR ADVENTURE TIME

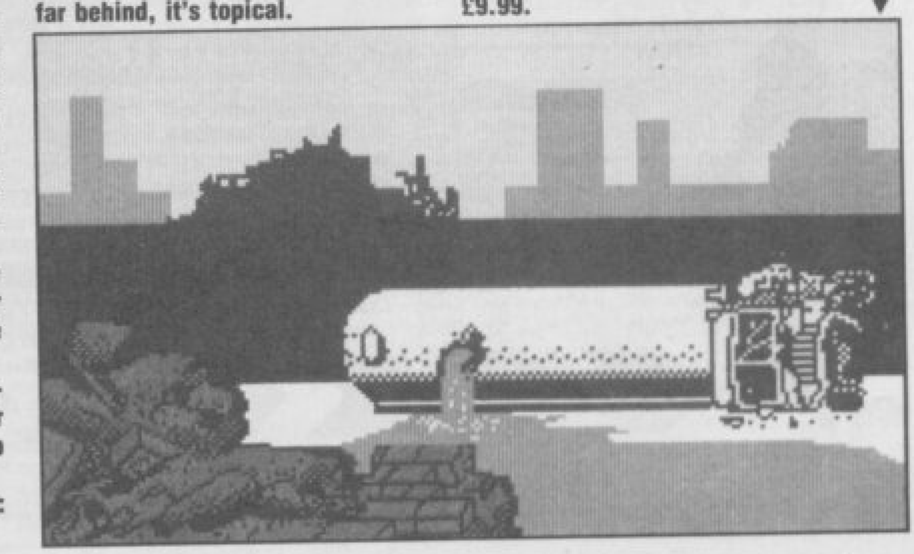
Aftershock is a graphic adventure based on the all-too-likely possibility of a nuclear power station running out of control — from Interceptor.

With Chernobyl still fresh in the memory, and Three Mile Island not far behind, it's topical.

Interceptor's earlier adventures featured some of the best graphics ever seen — this one doesn't look quite up to the same standard graphically but the plot's taut enough.

Streetdate: September. Price: £9.99.

▼



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ASTROCADE The Collection

C+VG (July) *"Fancy a Bit of Arcade Fun for £4.50? Then ASTROCADE on the Spectrum from D.D.S. Software could be for you. The six games on offer are Simeon, Caverns D'Or, Bomber, Zombies Luna-Rover and Alien".*

Your Sinclair (July) *"They are all very playable. The graphics are adequate, the sound excellent".* Addictiveness 7/10: Playability 8/10: Value for money 8/10.

CRASH (June) *"Overall the ASTROCADE Collection should keep any games player quiet . . ."*

P.C.W. (May) *"You can't call it a rip off at the price".*

Your Sinclair (July) *If you fancy a nostalgic bash (it's absolutely aaages since since I've potted a good Zombie!) then rush £4.50 to D.D.S."*

Stewart Green *"Now it's only £1.99+p&p. You can't afford not to buy it".*

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NEXT MONTH

Maybe you sensed it. Something in the air. First tremors a few months back.

Growing shockwaves with each new issue.

Something was happenng, dull stirings grew — became stronger. The world shakes, a new force fills the senses. Now it cannot be stopped.

In November the New *Sinclair User* explodes into the shops — and computer magazines won't ever be the same again.

Some simple facts: The magazine is going to have 146 pages. That's big. Check the competition. It means if it moves we'll review it. If we review it we'll review it first. That's a fact, too.

Sinclair User carries more reviews more quickly than our rivals. Count 'em.

We've had to put the price up 2p, but we've also put the number of pages up — by over 20 per cent.

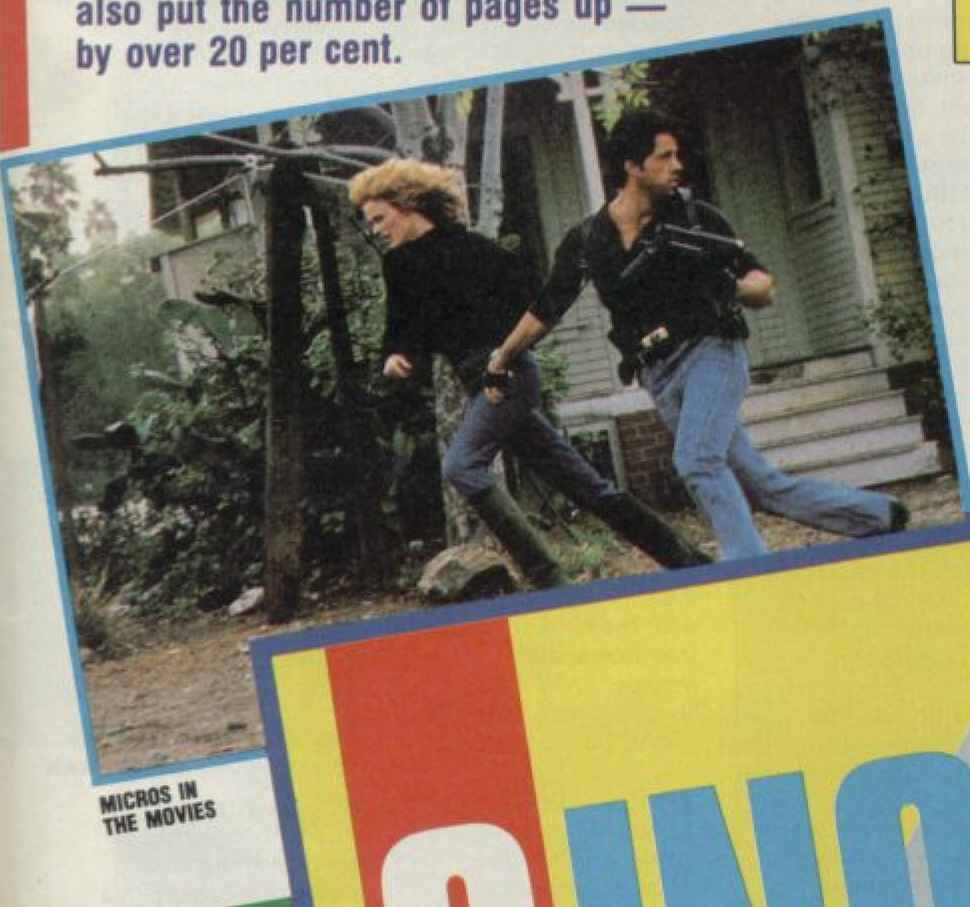
Here's another fact you'll need to know.

We've got the ultimate guide to the hot games for Christmas vital if you don't want to get left out in the cold. Relax — it's cheap. Very cheap. We're sticking it to the front of the magazine as a free present. It's 32 pages in full colour. And we know you'll like it.

There are features on Micros in the Movies. A look at programming sound on Amstrad's Sinclair smash the 128K+2 and reviews of all the new software launched at the Personal Computer World Show, previews, prices, pics everything — hardware too.

Oh yeah, one other thing, *Sinclair User*'s got a new front cover look to celebrate the transformation

A new style ● for a whole new ballgame.



MICROS IN THE MOVIES



128K+2





NOVEMBER SINCLAIR USER UNLEASHED OCTOBER 18

Gremlin



Would you buy a microcomputer magazine from these people? *Gremlin* has noticed that some of the other magazines have been trying to create a personality cult around some of the people that work on it. This is suposedly because 'it gives the readers people to identify with' but is really because computer journalists secretly want to be rock journalists who secretly want to be rock stars.

Unfortunately most of them have all the charisma and star potential of a dead stoat.

Anyway here is the *Sinclair User* team climbing every mountain and fording every stream. They're a real bunch of hip cats and cool dudes. The Mad Celt has got *In Search of Space* by Hawkwind and David (Sandie Shaw) Kelly cherishes Phil Spector's *Christmas Album*.

Lets go! Chill out! Phew, rock and roll! Badges and T-shirts saying 'Sinclair Users do it with squidgy rubber' and stickers stating 'My other computer is an Amiga' are available. A giant poster based on the picture above and signed by the team is being prepared and will be rush-released tomorrow.



Obsolescence built in

Cheap, nasty and a total rip off. Amstrad should be ashamed of themselves.

Is this the new 128+2? No. *Gremlin* reckons that's what can only be described as 'a good piece of kit' (this is real computer hack talk).

The object of discussion is the joystick Amstrad is forcing everyone to buy.

This comes in the same battleship grey as the machine and Amstrad is trying to suggest a retail price of £14.95 for it. It's terrible, utterly, utterly naff and looks like it will break after about one round of **Lightforce** or any arcade game worth its salt.

This would be an insignificant matter unworthy of *Gremlin's* lofty considerations were it not for the fact that honest Al Sugar has twiddled with the pins on the new machine such that you *have* to use the official stick.

Or had to. *Gremlin* has word of at least two independant companies producing specially adapted joysticks for the new machine, almost certainly better and cheaper (one reviewed in this issue). According to one industry spokesman "Amstrad pays almost nothing for those joysticks".

Who said, in reply to the question will there be any hands on experience of your product at the *Personal Computer World* Show? "The only hands-on at the show will be with the girls with the sashes". Here's a clue. It wasn't anyone from System Three.

Someone else, Beyond a doubt.

This Christmas a lot of people will buy a computer for the first time. In January, the stores and all the computer magazines will be inundated with basic questions like: Where does the TV lead connect into my computer? This will primarily be the fault of the store staff in the high-street chains who will say almost anything to get a sale.

Laskys which, in *Gremlin's* experience is about average for tosh talked, has begun a new service where for £39.99 experts will offer step by step advice. This is very expensive and *Gremlin* suggests you ring up one of the mags instead.

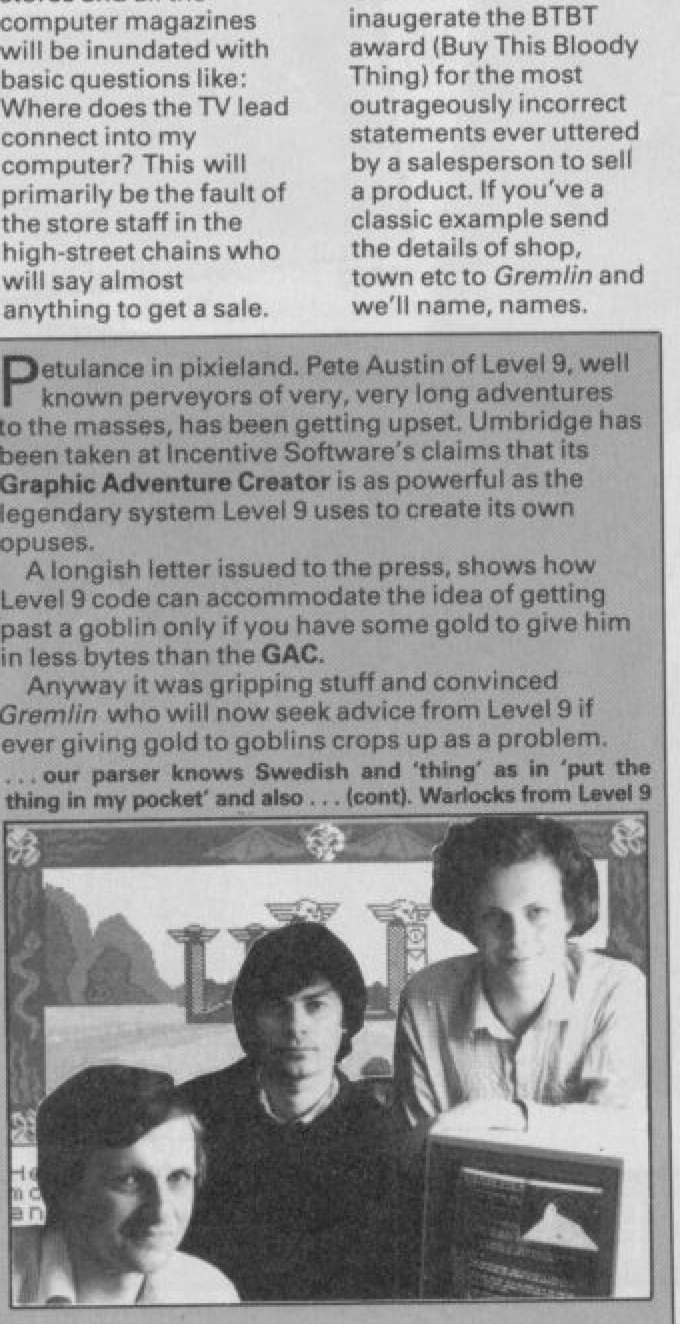
In fact, this month, *Gremlin* would like to inaugerate the BTBT award (Buy This Bloody Thing) for the most outrageously incorrect statements ever uttered by a salesperson to sell a product. If you've a classic example send the details of shop, town etc to *Gremlin* and we'll name, names.

Petulance in pixieland. Pete Austin of Level 9, well known perveyors of very, very long adventures to the masses, has been getting upset. Umbridge has been taken at Incentive Software's claims that its **Graphic Adventure Creator** is as powerful as the legendary system Level 9 uses to create its own opuses.

A longish letter issued to the press, shows how Level 9 code can accommodate the idea of getting past a goblin only if you have some gold to give him in less bytes than the **GAC**.

Anyway it was gripping stuff and convinced *Gremlin* who will now seek advice from Level 9 if ever giving gold to goblins crops up as a problem.

. . . our parser knows Swedish and 'thing' as in 'put the thing in my pocket' and also . . . (cont). Warlocks from Level 9



If you were to buy the other new Amstrad machine. The one with only one joystick port — the PC compatible — it could be one of the first things you'll be buying for it is **Leather Goddesses of Phobos**.

One surprising thing about **Leather Goddesses** (there are others) is that it comes from Infocom and is being marketted over here not by Dodgey Joe's Software from the small ads but by the Slone Squares themselves, Activision.

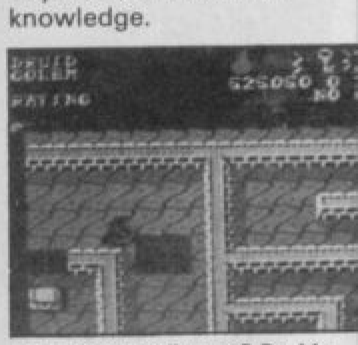
Given that there are a good many uncorrupted minds who read this magazine it would be unwise to reproduce any of the material from the press hand-out. Suffice to say it deals fairly directly with the kind of freetime social interaction which is a constant feature of the EMAP Christmas party.

Bloody deeds. US Gold is finding the going a bit rough with its much sought after **Gauntlet** licence.

First both Mastertronic (with **Storm**) and Firebird (with **Druids**) have beaten it to the shops with games which, it has to be said look an awful lot like **Gauntlet**. Now Gremlin Graphics (with **Avenger**) — which is also producing the official version for US Gold (!) — and Electric Dreams (with **Dauntless)** are trying to get in on the act. All this has made US Gold understandably quite unhappy since it paid quite a few pennies for the official UK licence.

Now it seems there's some mix-up over the US Gold's **Gauntlet** licence with Rod Cousens from Electric Dreams staking some claim to the Atari title — a suggestion that apparently lead to physical contact between Rod and US Gold's Geoff Brown in the lobby of a West London hotel. All very fine and Dandy.

Who will take who to court first under what claimed infringement is beyond even *Gremlin*'s knowledge.

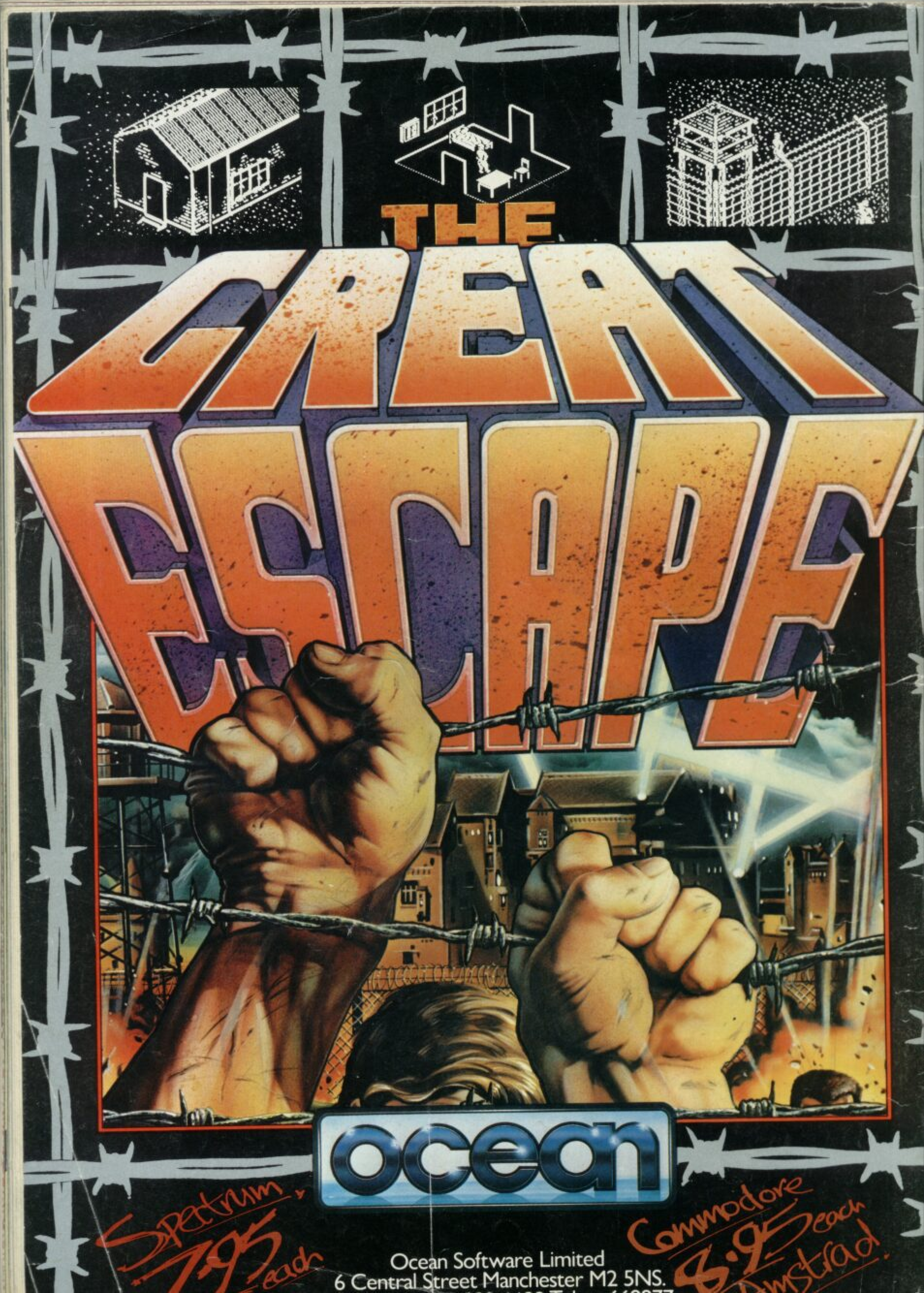


Licence what licence? Druids

Grown men burst into torrents of tears. A thousand hearts are broken in a single moment.

Why all this woe and gnashing of teeth? The devine Clare Edgeley has left the magazine to become PR person for Rainbird.

Perhaps Clare felt drained after several years at the centre of this white-hot furnace of activity that is *Sinclair User*. Perhaps she was offered more money. Anyway *Gremlin* wishes her well and expects now to receive a better class of free lunch ■


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